

THOMSON

33MS24E

MODEL

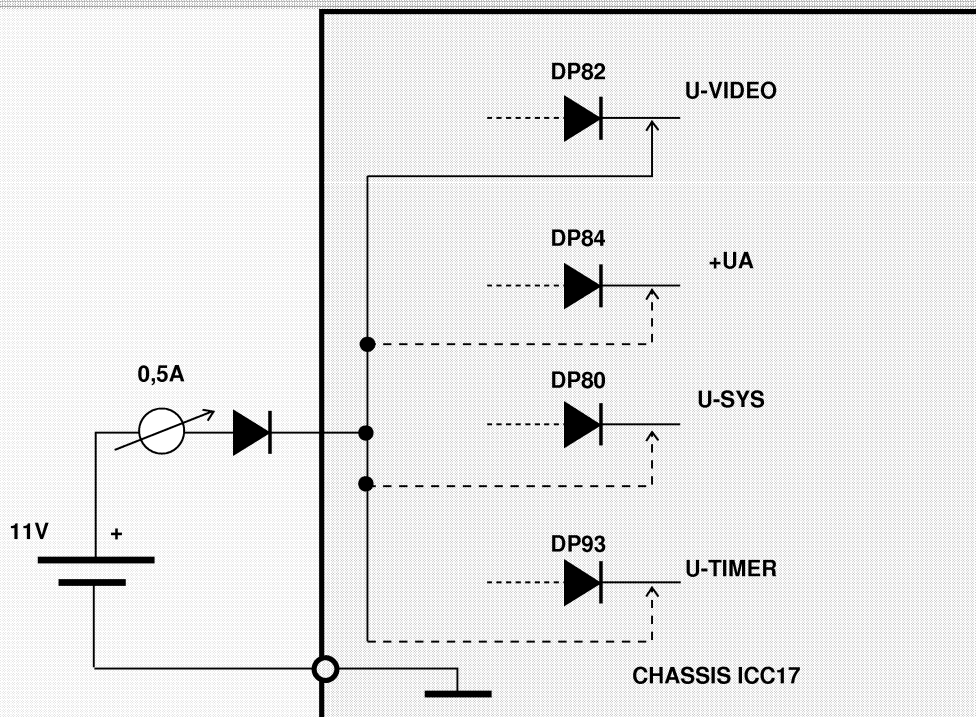
SERVICE MANUAL

SECONDARY DC-VOLTAGES

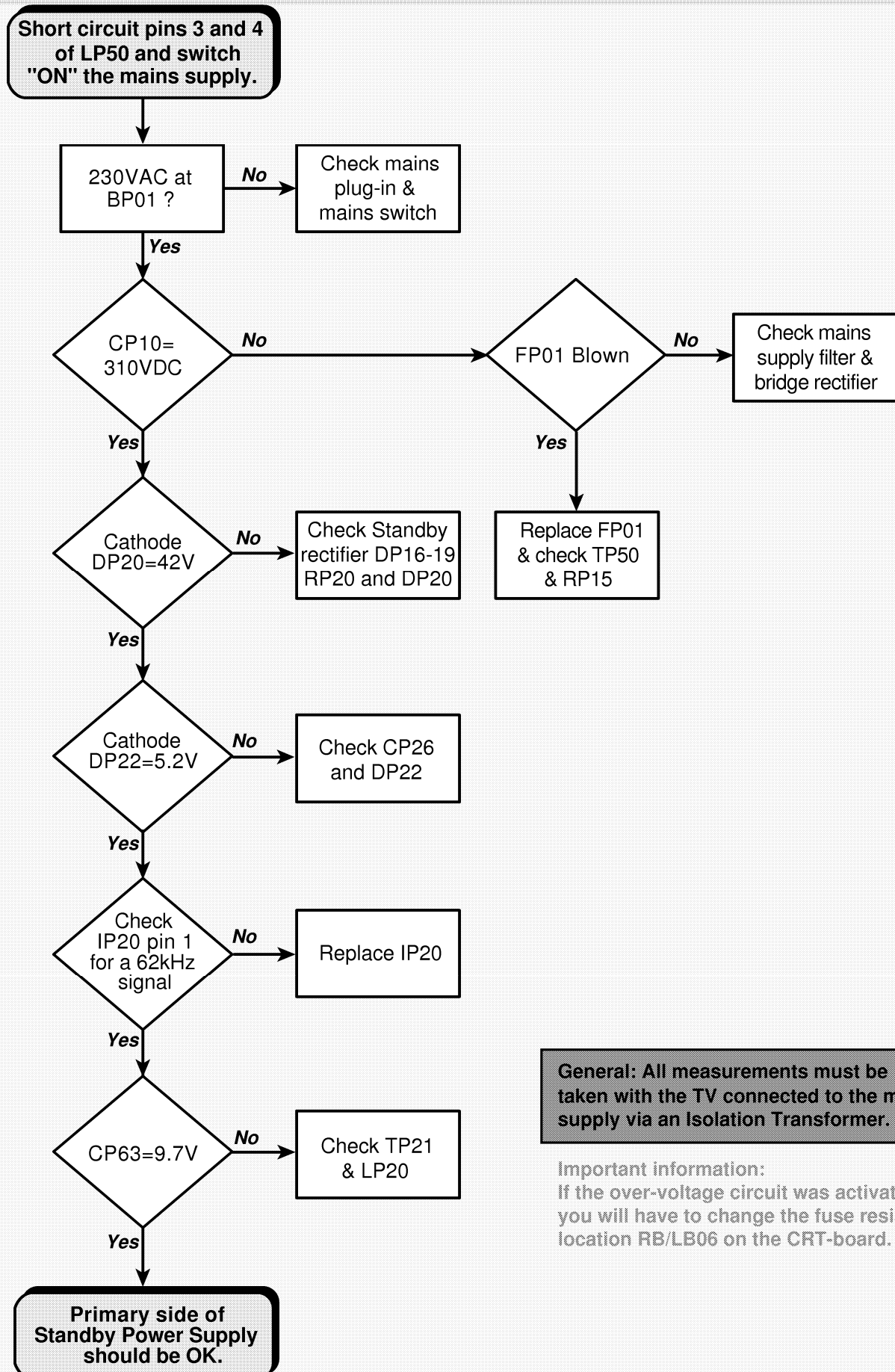
All measurements in this chapter must be done WITHOUT the mains supply connected to the TV.

Test circuit:

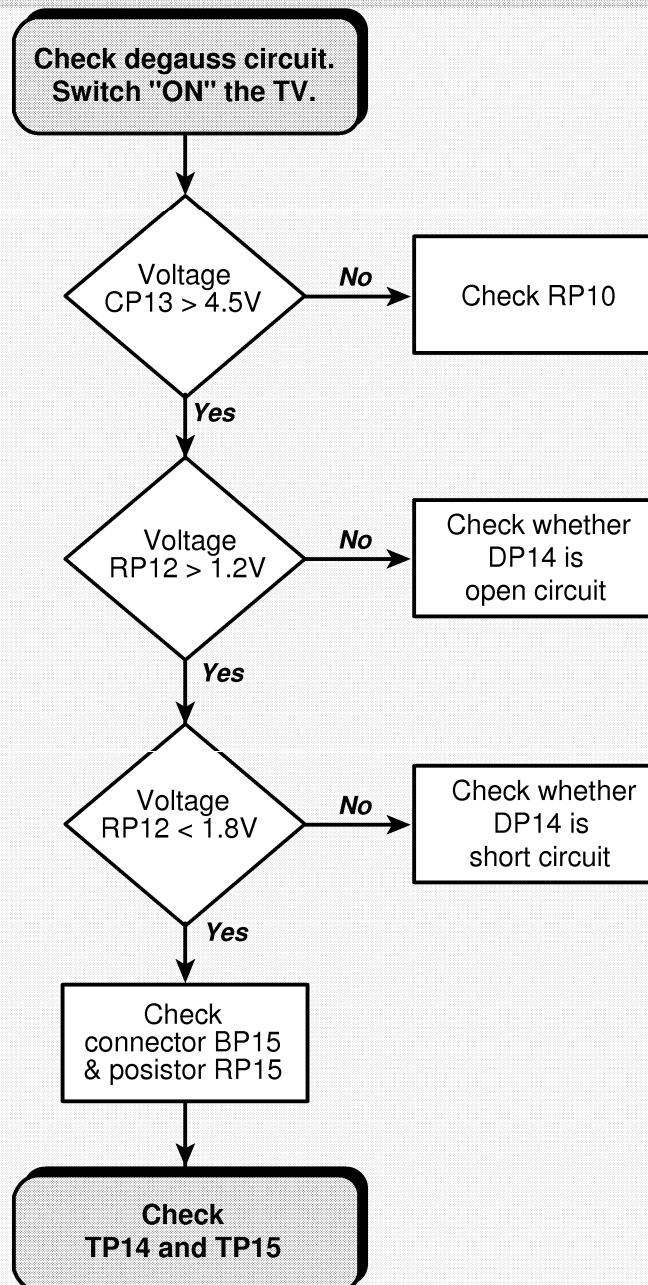
The external voltage source is provided by a variable DC-power supply with its output voltage set to 11V and the current limitation set to 500mA's. The negative terminal of the DC-power supply must be directly connected to the chassis secondary ground plane. The positive terminal of the DC-power supply is first connected to an ammeter and then the anode of an isolation diode. The cathode of the isolation diode is then connected to the load on the chassis as shown below. Measure the current drawn by each load tested.



STANDBY POWER SUPPLY - PRIMARY SIDE



DEGAUSSING CIRCUIT



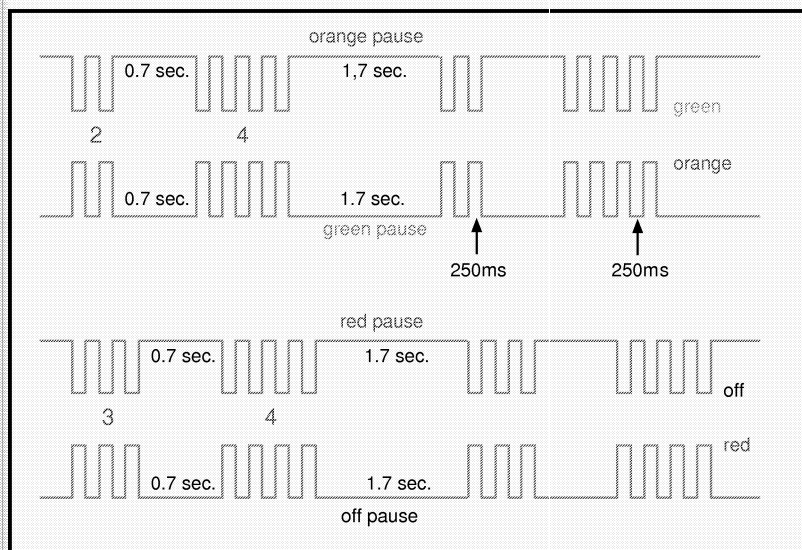
GENERAL INFORMATION - LED BEHAVIOUR

LED FLASHES

Error message transmission.

The error codes are signalled by the TV's red LED .

Count the number of flashes : the error code is two burst separated by a pause of 0.7 sec. and repeated four times. There is 1.7 sec between each codes sequence.

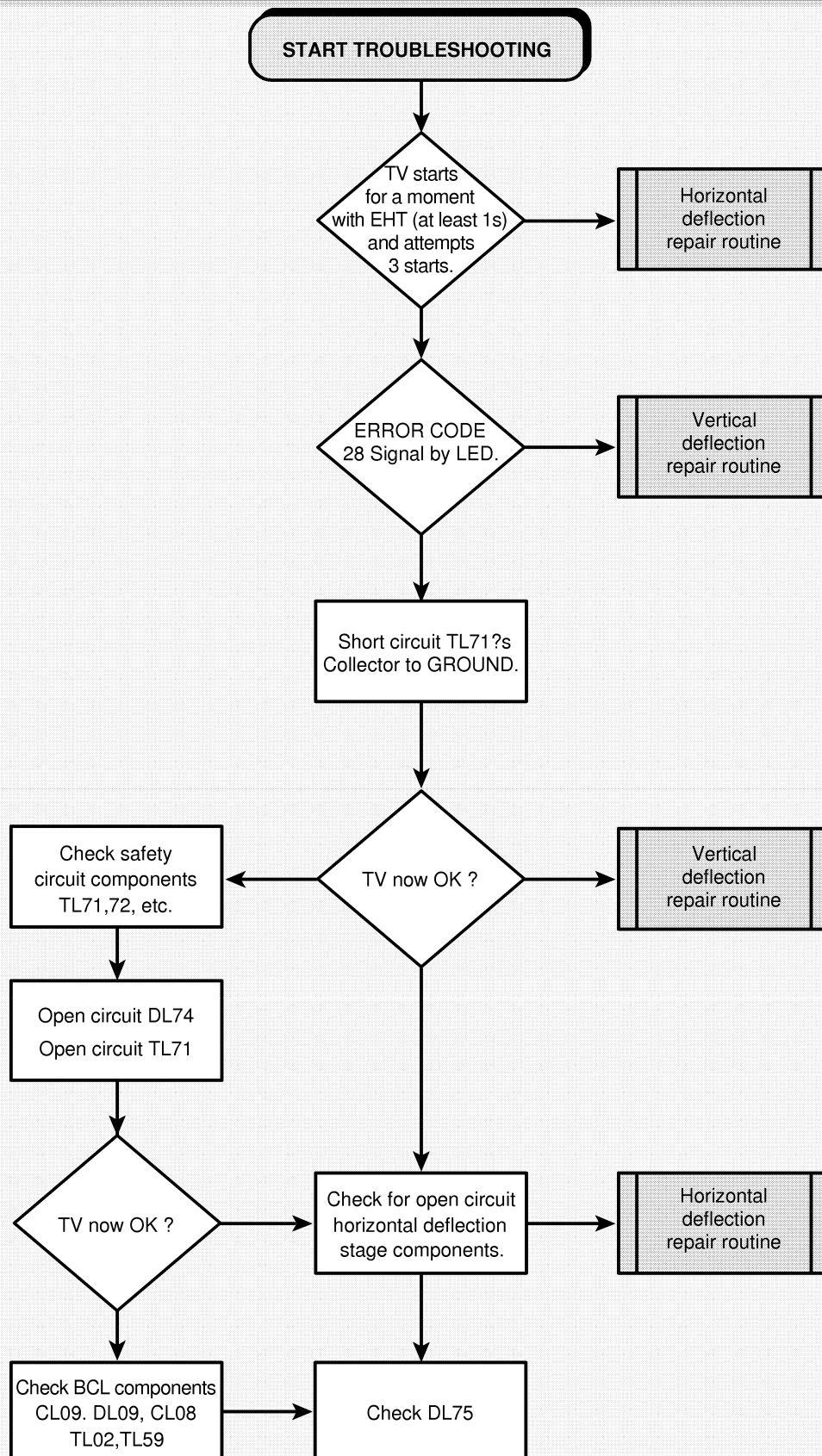


Currently all ICC17 TV sets are fitted with a Bicoloured LED, the red part is the Standby LED whilst, the green part is directly connected to the switched +8V supply. Therefore, the colour of the LED will depend upon the state of this voltage, the chart below gives the corresponding LED-colours:

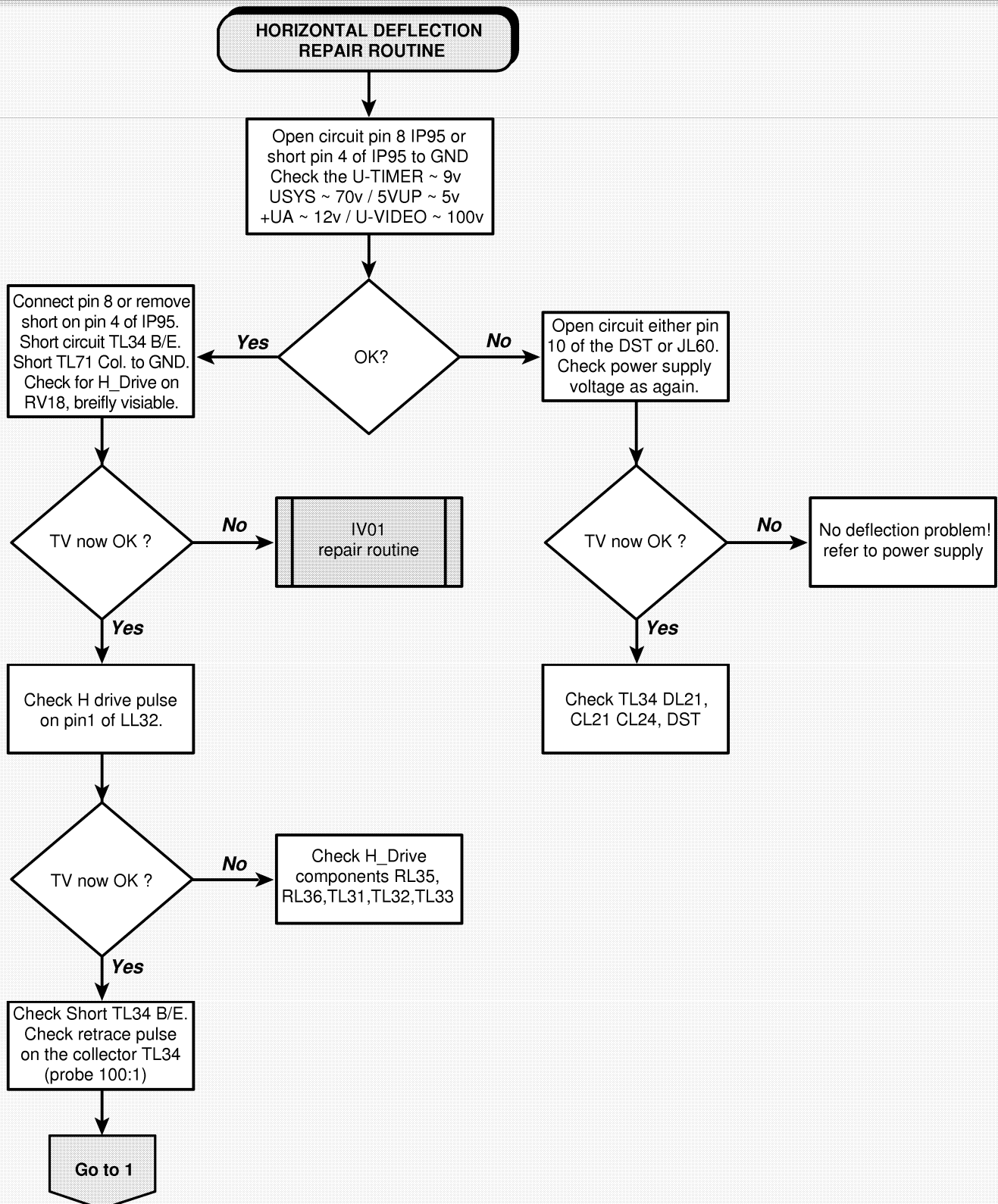
	LED-port	
	off	on
switched +8 V	off	on
on	green	orange
off	off	red

CODES	DEFAULTS
12	AUDIO-DPL DOES NOT ANSWER
14	TDA8855H DOES NOT ANSWER
15	AUDIO-MSP PROCESSOR NO LONGER RESPONDING
19	TUNER DOES NOT ANSWER
21	SDA LINE BEING HELD LOW
23	CLOCK HELD AT LOW LEVEL, SCL LINE HELD AT A LOW LEVEL
25	SWITCHED 5V NOT AVAILABLE
26	TUBE DOES NOT GET WARM IN TIME
27	THE DEFLECTION STAGE HAS DETECTED A FAULT ON MORE THAN THREE OCCASIONS
28	TDA VERTICAL GUARD VOLTAGE EXCEEDED
29	TDA HORIZONTAL GUARD VOLTAGE EXCEEDED
31	INTERNAL SOFTWARE ERROR
32	A SOFTWARE-TIMER HAS BEEN REQUESTED, BUT IS NOT YET AVAILABLE
34	THE NVM CHIP DOES NOT ANSWER
35	+13V IS NOT AVAILABLE
36	WRONG NVRAM ADDRESS PASSED TO THE BUS - HANDLER
37	UNEXPECTED LEVEL ON NMI (INTERRUPT) LINE FOUND (POSSIBLE CAUSE : TUBE FLASHOVER)
38	HEAP FULL
41	BUS (DATA LINE) NOT RECOVERABLE

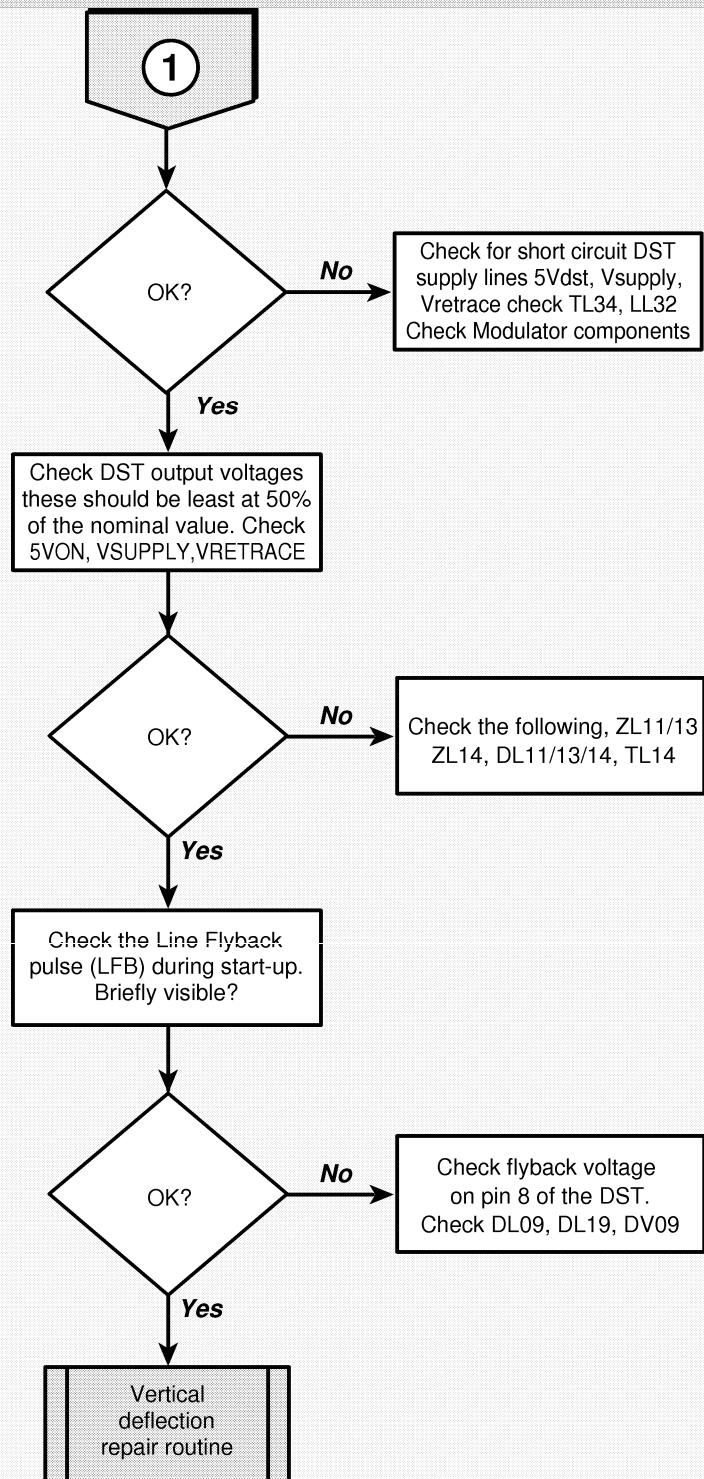
DEFLECTION CIRCUIT CHECK



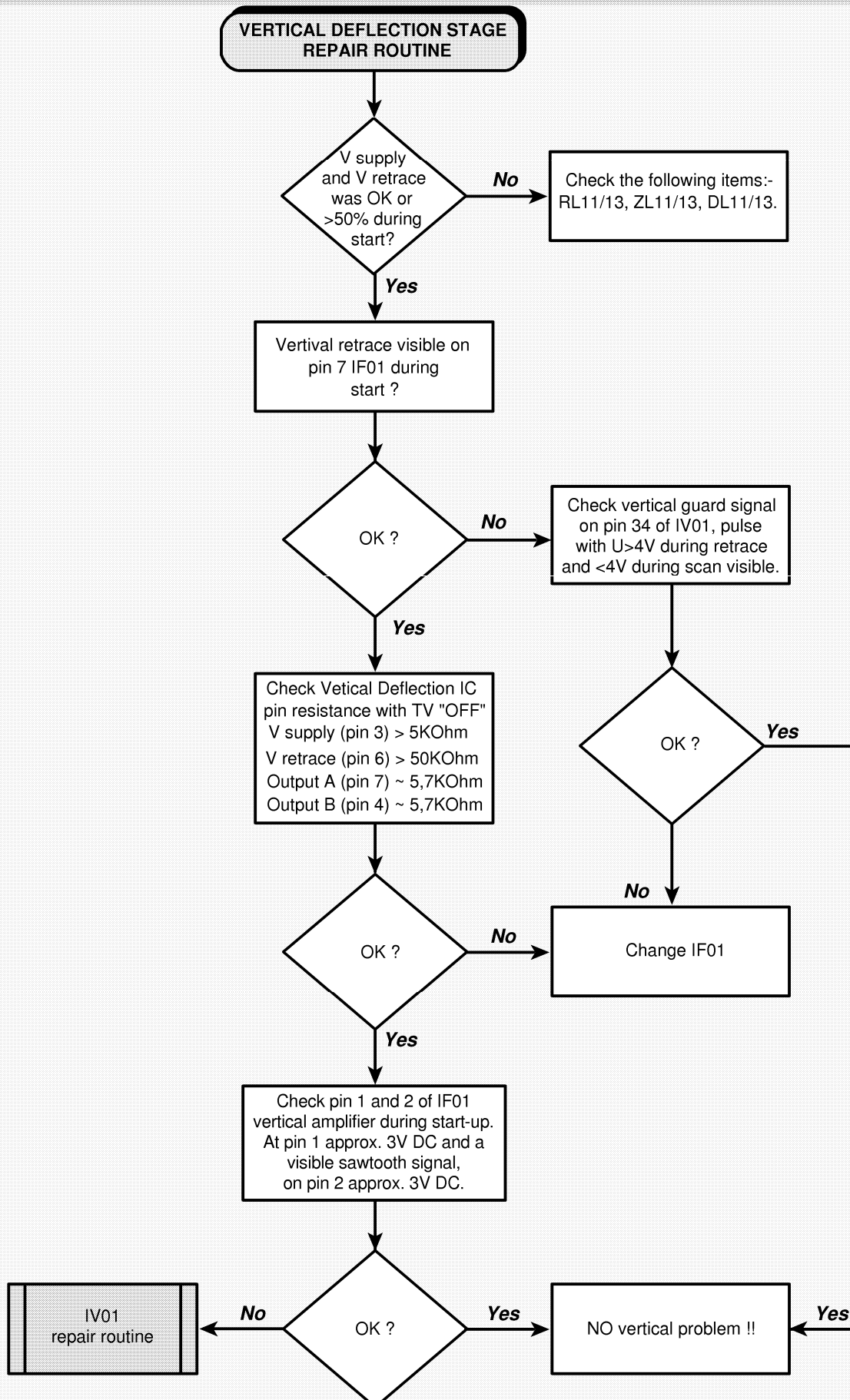
DEFLECTION CIRCUIT CHECK



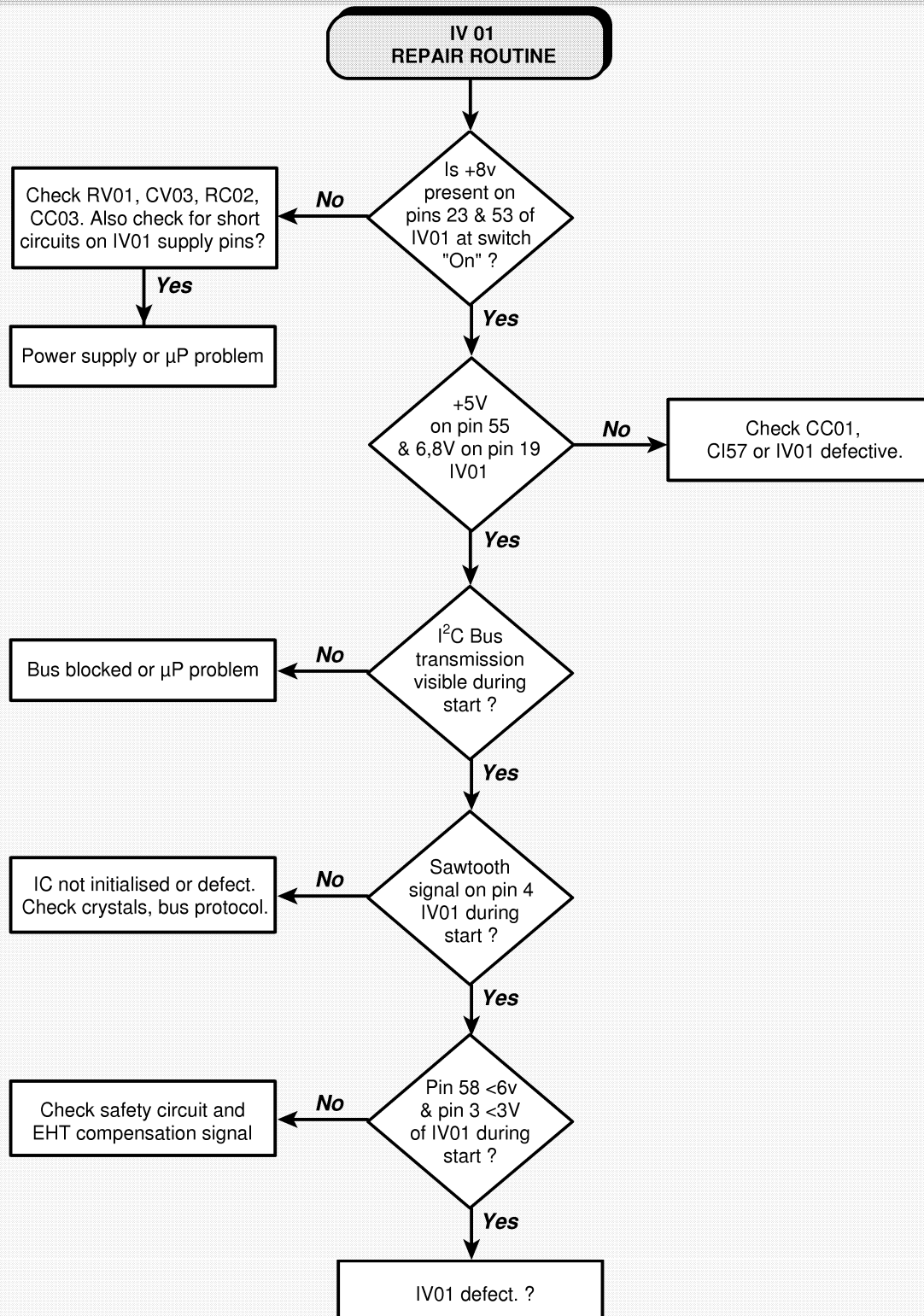
DEFLECTION CIRCUIT CHECK



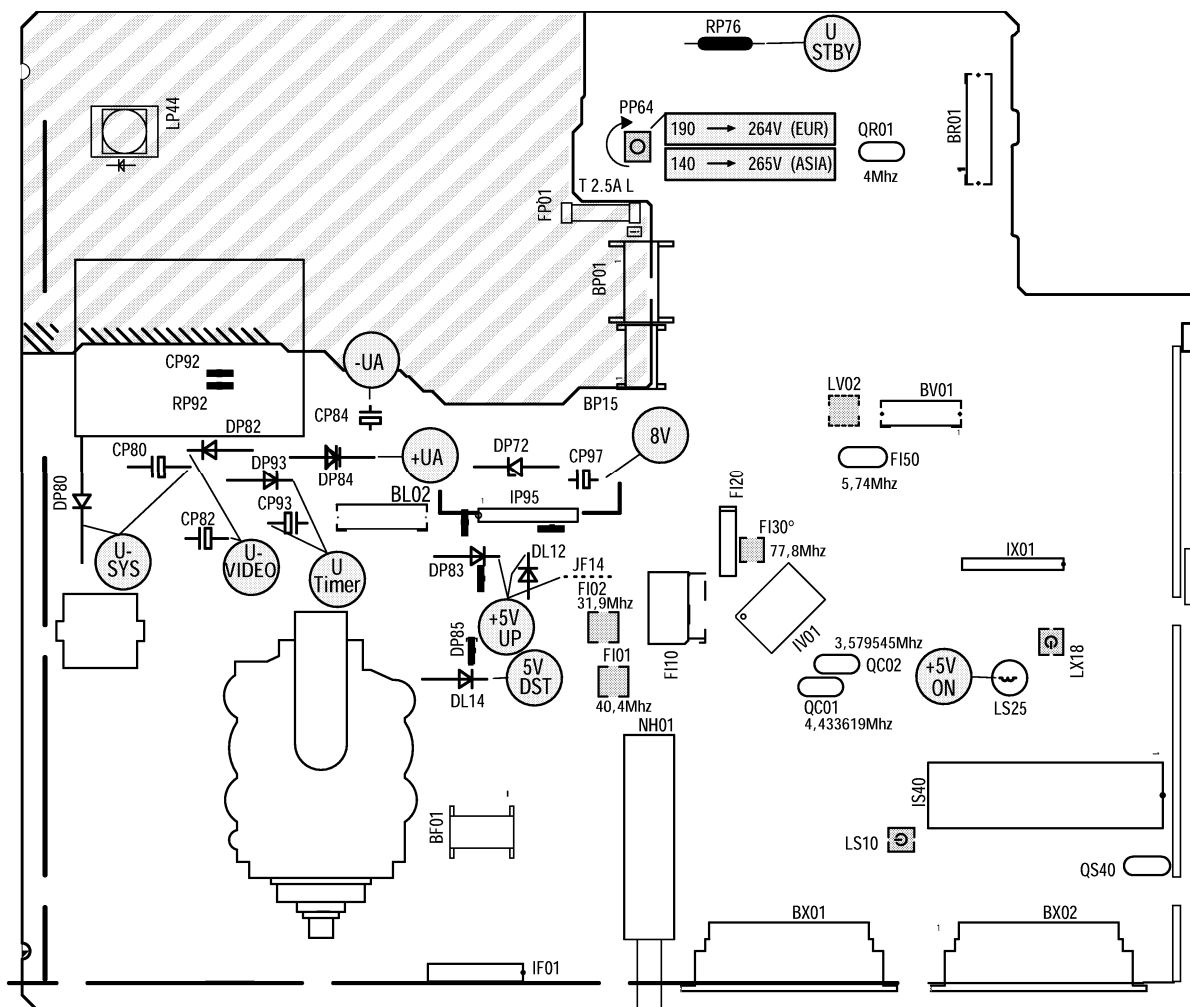
DEFLECTION CIRCUIT CHECK



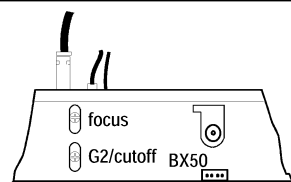
DEFLECTION CIRCUIT CHECK



**LOCATION OF CONTROLS - EMBLACEMENT DES REGLAGES -
SERVICE LAGEPLAN - POSIZIONE REGOLATORI DI SERVIZIO -
SITUACIÓN DE LOS AJUSTES**



- it is not necessary , to adjust FI30 by after sales

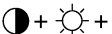
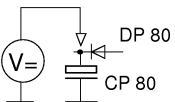
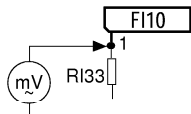
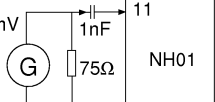
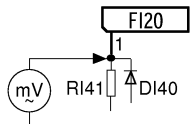
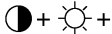
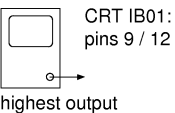
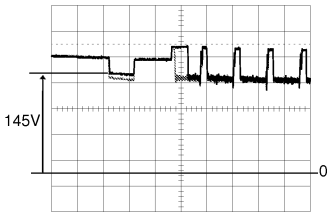


Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello châssis collegata alla rete.
Parte del chassís conectada a la red.



Use isolating mains transformer -
Utiliser un transformateur isolateur du secteur -
Trenntrafo verwenden -
Utilizar un transformador aislador de red -
Utilizzare un trasformatore per isolarvi dalla rete

ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONI - AJUSTES

U Sys	PP 64	 = 50% TV to AV1 : Black test pattern		<table border="1"> <thead> <tr> <th>Tube</th><th>Format</th><th>Usys</th><th>Jumper</th><th>RL65</th></tr> </thead> <tbody> <tr> <td>A51EBV13X01</td><td>4:3</td><td>128V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A51EFS83X191</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A59EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr> <td>A66EHJ43X15</td><td>4:3</td><td>132V+/-0,5V</td><td>JL81</td><td>24k</td></tr> <tr> <td>A59EGD048X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A68EGD038X30</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A68EGD038X70</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A68AGA25X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A80AEJ15X01</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>A80AEJ15X99</td><td>4:3</td><td>126V+/-0,5V</td><td>JL80</td><td>4k7</td></tr> <tr> <td>W56EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr> <td>W66EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> <tr> <td>W76EGV023X015</td><td>16:9</td><td>138V+/-0,5V</td><td>JL82</td><td>47k</td></tr> </tbody> </table>	Tube	Format	Usys	Jumper	RL65	A51EBV13X01	4:3	128V+/-0,5V	JL80	4k7	A51EFS83X191	4:3	126V+/-0,5V	JL80	4k7	A59EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A66EHJ43X15	4:3	132V+/-0,5V	JL81	24k	A59EGD048X30	4:3	126V+/-0,5V	JL80	4k7	A68EGD038X30	4:3	126V+/-0,5V	JL80	4k7	A68EGD038X70	4:3	126V+/-0,5V	JL80	4k7	A68AGA25X01	4:3	126V+/-0,5V	JL80	4k7	A80AEJ15X01	4:3	126V+/-0,5V	JL80	4k7	A80AEJ15X99	4:3	126V+/-0,5V	JL80	4k7	W56EGV023X015	16:9	138V+/-0,5V	JL82	47k	W66EGV023X015	16:9	138V+/-0,5V	JL82	47k	W76EGV023X015	16:9	138V+/-0,5V	JL82	47k
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iF Alignment Alignement FI	trap 40.4Mhz FI 01	Switch set to standard BG Commuter le TV au standard BG iF Signal 40,4MHz (BG) 31,9MHz (BG)		Adjust FI01 for minimum value at 40,4Mhz																																																																						
	trap 31.9Mhz FI 02			Adjust FI02 for minimum value at 31,9Mhz																																																																						
U G2 / cutoff	SCREEN	 = 50% AV (no Signal, black screen)																																																																								
FOCUS	FOCUS LL05	 Test pattern (standard values)		Sharp picture																																																																						

MODO SERVICIO

I - ENTRADA/SALIDA MODO SERVICIO

1 ACCESO AL MODO SERVICIO

Acceso con panel control TV

- Con el mando a distancia conectar a STANDBY el televisor.
- Desconectar el aparato con el interruptor de la red (esperar hasta que el LED se apague).
- Pulse los botones **PR** - y **VOL** - y sin soltarlos, pulsar la tecla **MARCHA/PAUSA**.
- Libere los botones **PR** - y **VOL** - (RS).

Soft Ver.: V1.00.0 0080
Config.: A5---N
Serial No.: 103465071

▶ QUIT
TUBE
SETUP
GEOMETRY
VIDEO
IF

Nota :

En modo servicio:

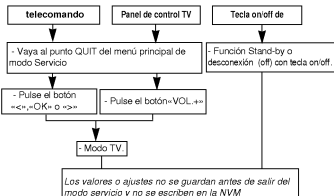
- Se ignora la función de bloqueo y se inicializa la función "cerradura niños".
- Anula todas las horas programadas.
- La pantalla de SCART es ignorada.
- La detección WSS AV Link, EPG, y Teletext son desactivados.
- El apagado automático en caso de ausencia de señal de antena es desactivado.
- El contraste, color y brillo son puestos a los valores de fábrica.
- la nitidez es puesta al punto medio.
- La expansión de contrast al nivel bajo.
- Modo instalación es desactivado.
- Zoom y formato ignorados.

2 SALIDA TEMPORAL DEL MODO SERVICIO

- Pulse Salir en el mando a distancia.
- Con el botón Menu puede acceder al menú de uso cotidiano.

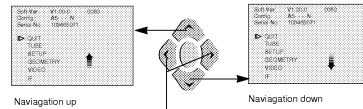
- Puede entrar al Menú Servicio con el botón azul.

3 SALIDA DEL MODO SERVICIO



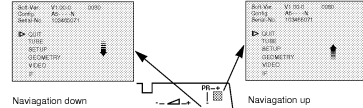
II - NAVIGATION INSIDE THE SERVICE MODE - DEPLACEMENT DANS LE MODE SERVICE FUNCTIONS WALLIN SERVICE MODE - OPZIONI NEL SERVICE MODE - BUSQUEDA EN MODO SERVICIO

1 REMOTE CONTROL - TELECOMMANDE - FERNBEDIENUNG TELECOMANDO - MANDO A DISTANCIA



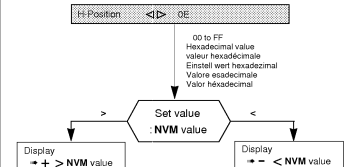
- Select option
 - Option auswählen
 - Selezionare l'opzione
 - Seleccionar opción
- "Change" value
"Wert" finden
"Cambiare" valore
"Cambiar" valor

2 TV CONTROL PANEL - CLAVIER TV - TASTATUR DES FERNSEHGERÄTS - COMANDI DEL TELEVISORE



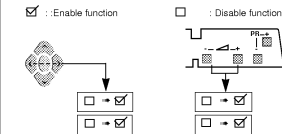
- Select option
 - Option auswählen
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 - Seleccionar opción
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3 DISPLAYING THE VALUE OF THE SETTING - AFFICHAGE DES VALEURS - ANZEIGE DES EINSTELL WERTS VISUALIZZAZIONE DEL VALORE DELLA REGOLAZIONE - VISUALIZACION DEL VALOR DE AJUSTE



4 TOGGLE FUNCTIONS - VALIDATION DES FONCTIONS EIN-UND AUSSCHALT FUNKTIONEN - FUNZIONI DI COMMUTAZIONE - FUNCIÓN CONMUTACION

To enable a function check ☒ the box.
Pour valider une fonction cocher ☒ la case correspondante.
Zum Implementieren einer Funktion das Kontrollkästchen ☒ aktivieren (anzukreuzen).
Per implementare una funzione d' verifica, (verificare) ☒ la casella.
Para poner en funcionamiento una función verifique (señale) ☒ la casilla.



5 STORING VALUES IN MEMORY - MEMORISATION DES VALEURS - SPEICHERN DER WERTE - MEMORIZZARE I VALORI - VALORES ALMACENADOS EN LA MEMORIA

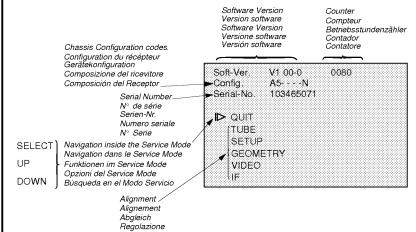
After setting, the values are stored in NVM.
Après réglages les valeurs sont mémorisées en NVM.
Nach dem Einstellen werden die Werte im NVM gespeichert.
Dopo la regolazione i valori vengono memorizzati in NVM.
Después del ajuste, los valores son almacenados en NVM.

The box ☐ becomes ☒.
During alignment, values are temporarily stored in RAM.
En cours d'alignement les valeurs sont mémorisées temporairement en RAM.
Während des Abgleichs werden die Werte vorübergehend in RAM gespeichert.
Durante l'allineamento i valori vengono memorizzati provvisoriamente sulla RAM.
Durante el ajuste, los valores son almacenados temporalmente en RAM.

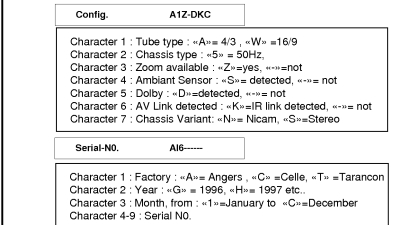
- Store** ➡ Copies RAM values into NVM
Copie la valeur RAM en NVM
Kopieren des Werts von RAM nach NVM
Copiare i valori RAM in NVM
Copiar valores RAM en NVM
- Restore** ➡ Copies all values from NVM into RAM.
Copie toutes les valeurs des données NVM en RAM
Kopiert alle NVM-Datenwerte in den RAM
Copiare tutti i valori da NVM sulla RAM
Copiar todos los valores de NVM a RAM
- ROM Default** ➡ All the default values of a page in use are stored in RAM.
L'ensemble des valeurs par défaut d'une page courante est chargé en RAM.
Sämtliche Standardwerte der aktuellen Seite werden im RAM geladen.
Tutti i valori di default di una pagina in uso vengono memorizzati sulla RAM.
Todos los valores por defecto de la página en curso están almacenados en RAM.

III - LITE-MENU FOR FIELD SERVICE MODE - MENUS DU MODE SERVICE

1 MAIN MENU - MENU PRINCIPAL



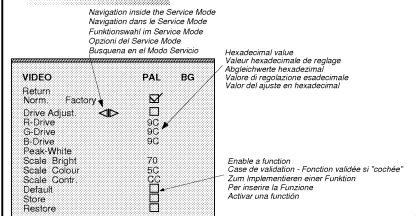
TV CONFIGURATION - CONFIGURATION DU TV - GERÄTEKONFIGURATION - CONFIGURAZIONE DEL TV - CONFIGURACIÓN DEL TV



TIME COUNTER - COMPTEUR DE TEMPS - BETRIEBSSTUNDENZÄHLER - CONTATORE - CONTADOR

The counter indicates the TV's number of service hours. It counts from 0 to 65535 hours.
The counter indicates the number of hours of service of the TV. Il compte de 0 à 65535 heures. L'affichage est en hexadécimal.
Der Zähler zeigt an, wieviele Stunden der Fernseher in Betrieb ist. Die Anzeige ist hexadécimale.
Il contatore indica il numero di ore di servizio del TV. Può contare da 0 a 65535. La visualizzazione è esadecimale.
El contador indica el número de horas de servicio de la TV. Cuenta de 0 a 65535 horas. El visualizador es hexadecimal.

2 SUBMENU - SOUS-MENU

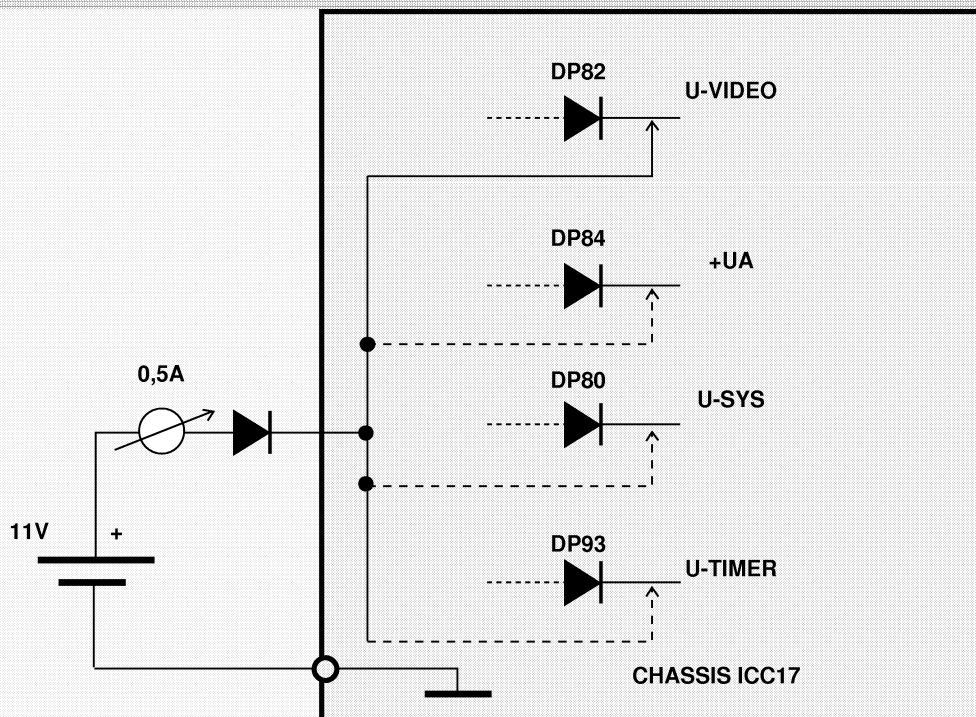


SECONDARY DC-VOLTAGES

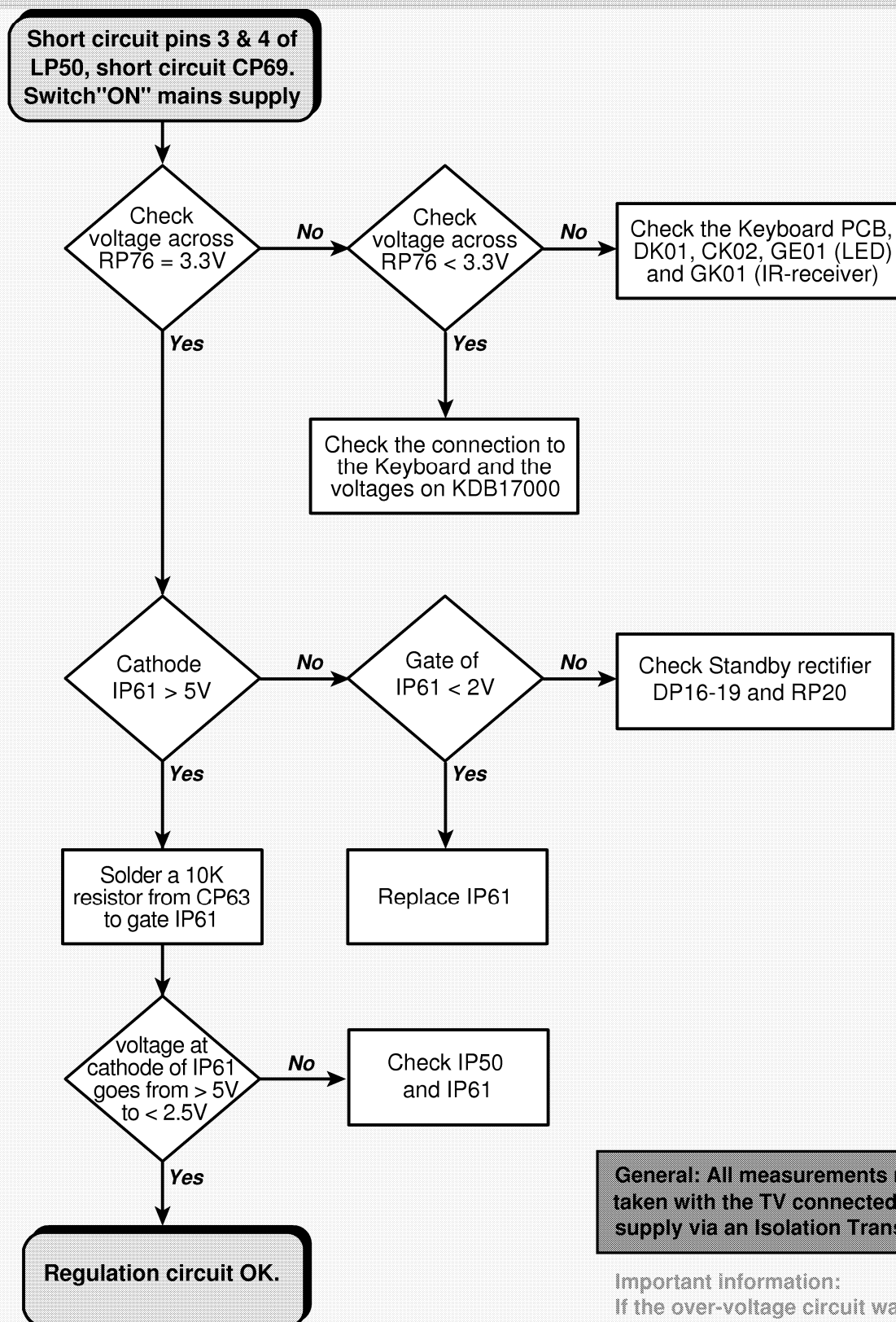
All measurements in this chapter must be done WITHOUT the mains supply connected to the TV.

Test circuit:

The external voltage source is provided by a variable DC-power supply with its output voltage set to 11V and the current limitation set to 500mA's. The negative terminal of the DC-power supply must be directly connected to the chassis secondary ground plane. The positive terminal of the DC-power supply is first connected to an ammeter and then the anode of an isolation diode. The cathode of the isolation diode is then connected to the load on the chassis as shown below. Measure the current drawn by each load tested.

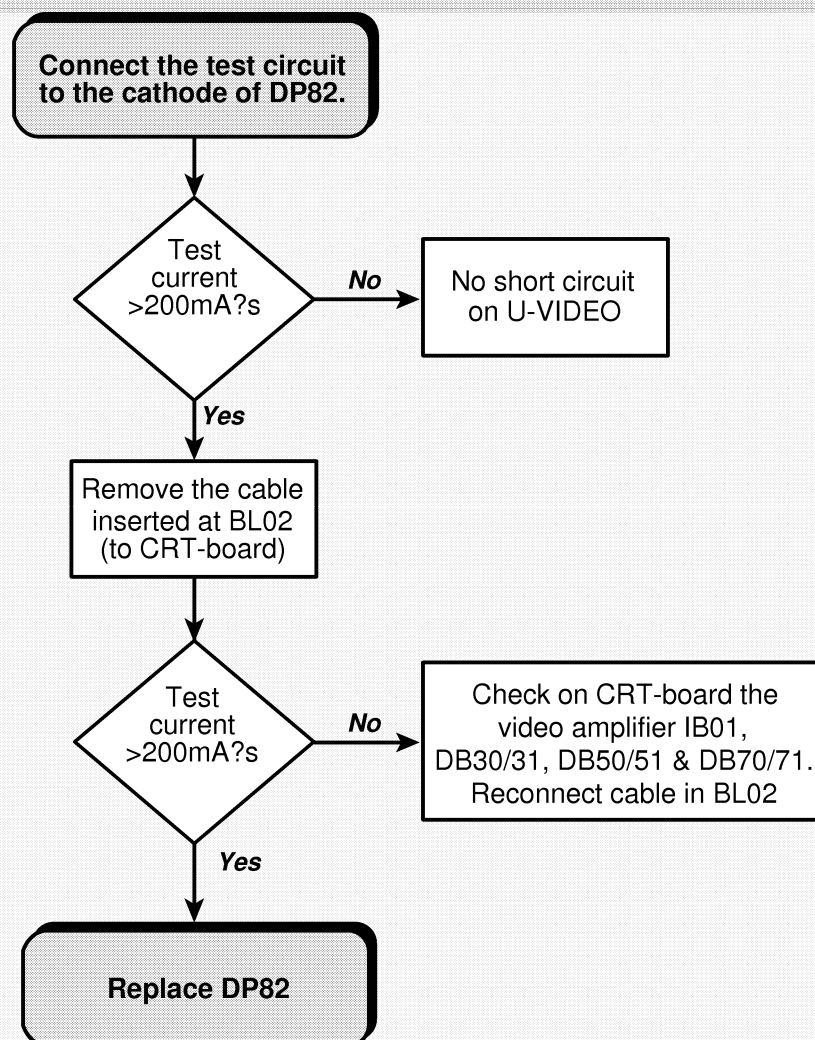


STANDBY POWER SUPPLY - SECONDARY SIDE



After finishing this test, please remove the short circuits from pins 3/4 of LP50 and CP69 also remove the 10k resistor.

POWER SUPPLY - SECONDARY SIDE : U-VIDEO

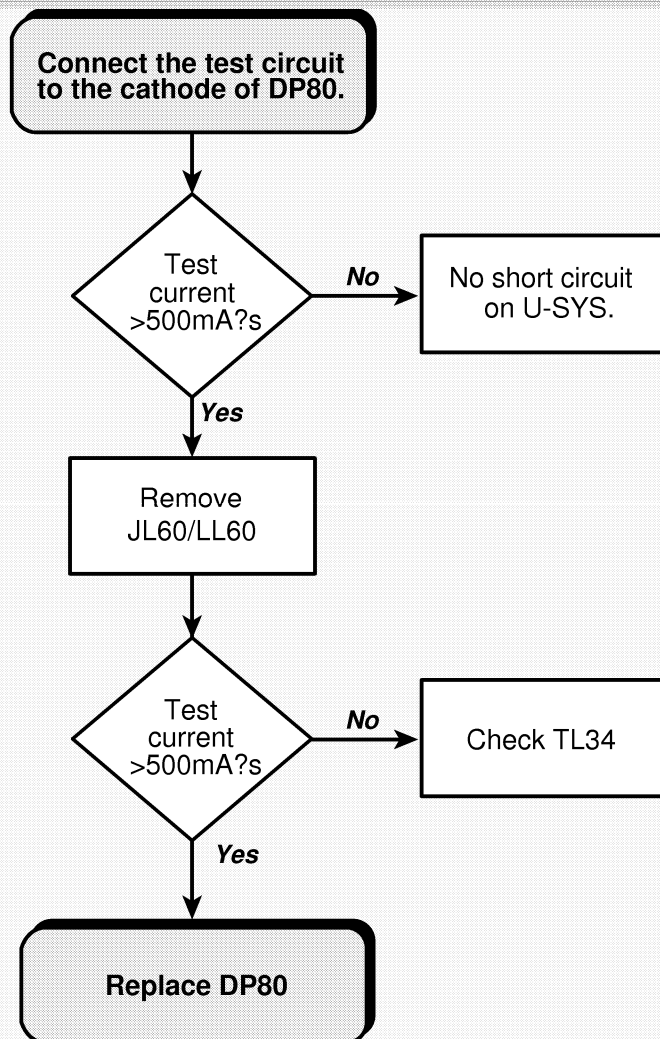


After finishing this test, please replace cable BL02 and remove the test circuit.

General: All measurements must be taken with the TV connected to the mains supply via an Isolation Transformer.

Important information:
If the over-voltage circuit was activated, you have to replace the fuse resistor at location RB/LB06 on the CRT-board.

POWER SUPPLY - SECONDARY SIDE : U-SYS

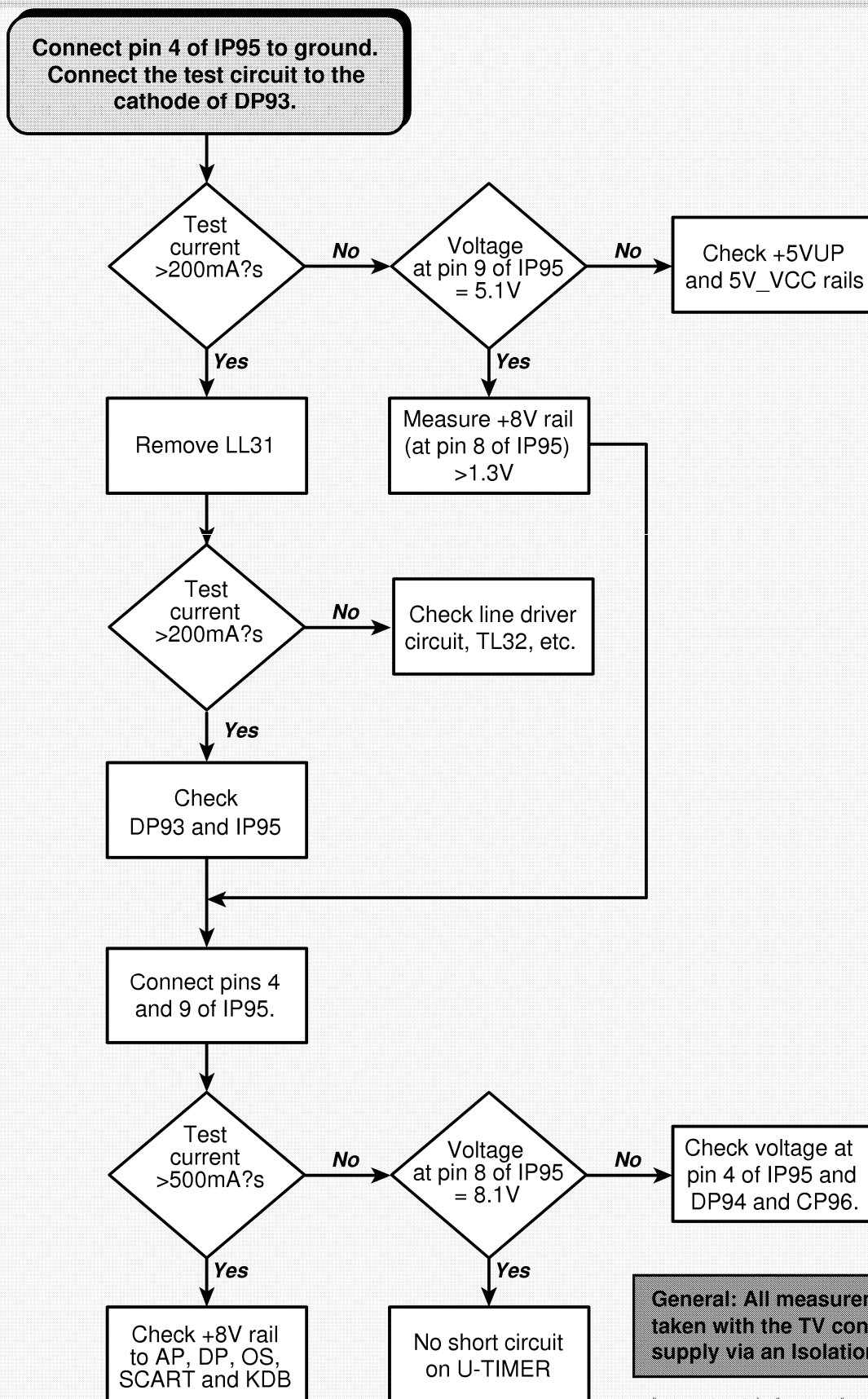


After finishing this test, please replace JL60/LL60 and remove the test circuit.

General: All measurements must be taken with the TV connected to the mains supply via an Isolation Transformer.

Important information:
If the over-voltage circuit was activated, you have to replace the fuse resistor at location RB/LB06 on the CRT-board.

POWER SUPPLY - SECONDARY SIDE : U-TIMER

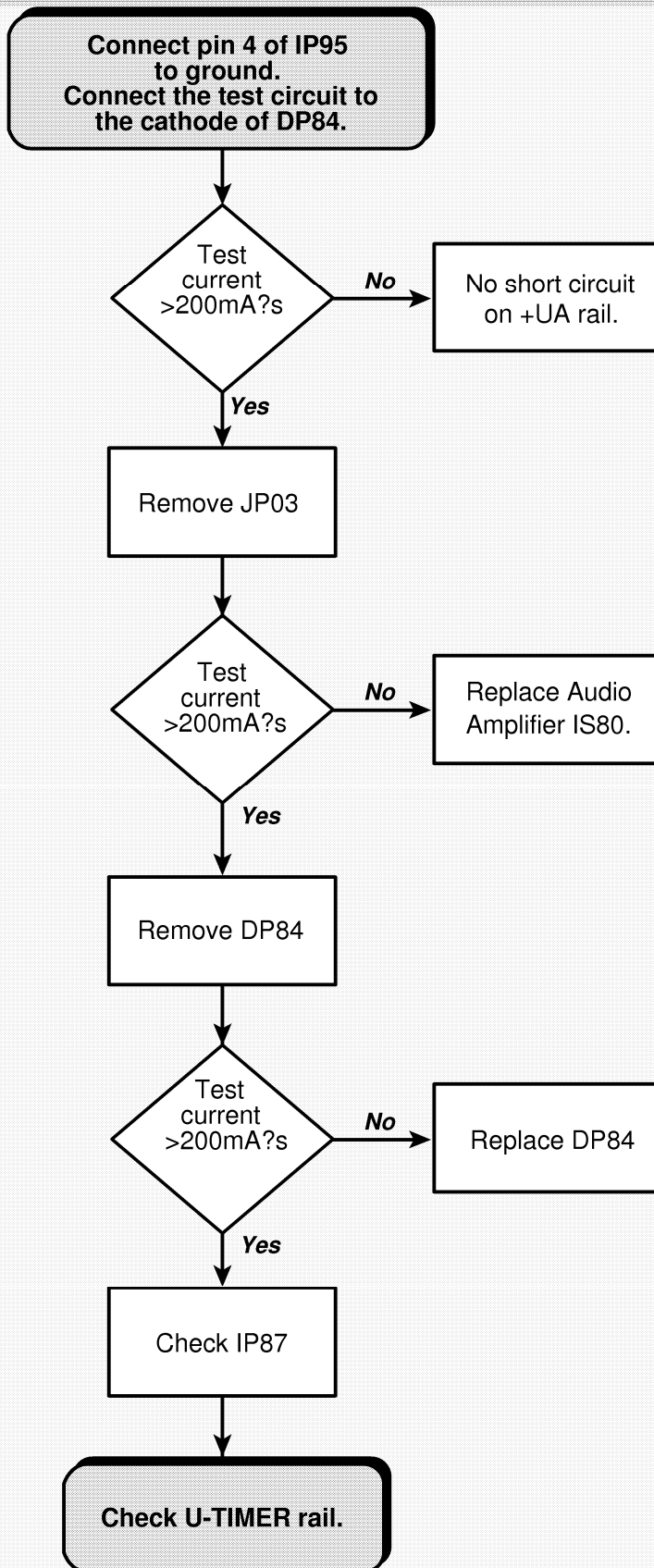


After finishing this test, please replace LL31, remove the link between pins 4 and 9 of IP95 and remove the test circuit.

Important information:

If the over-voltage circuit was activated, you have to replace the fuse resistor at location RB/LB06 on the CRT-board.

POWER SUPPLY - SECONDARY SIDE : +UA



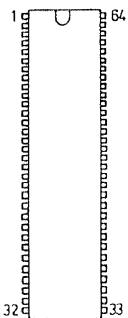
General: All measurements must be taken with the TV connected to the mains supply via an Isolation Transformer.

Important information:
If the over-voltage circuit was activated, you have to replace the fuse resistor at location RB/LB06 on the CRT-board.

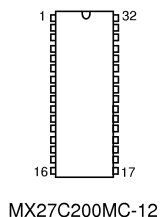
LIST OF ABBREVIATIONS - LISTE DES ABREVIATIONS- ABKÜRZUNGEN LISTA DELLE ABBREVIAZIONI - LISTA DE ABREVIACIONES
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● +USYS:	System voltage
● +U_VIDEO:	Video drive voltage for the CRT board
● + STDBY_ON:	Standby data (0V standby , 0.6v switched ON)
● +5V DST:	5v unregulated voltage from the DST to supply the tuner and audio MSP device
● +5V ON:	5v regulated voltage from the DST to supply the tuner and audio MSP device
● +5V UP :	Microprocessor supply voltage
● BCL:	Beam current limiting information
● CVBS:	Composite video / luminance signal
● CVBS_OUT:	Composite video output
● CVBS_TXT:	Composite video for teletext extraction
● DEGAUSS:	Degauss signal
● EW :	East / West
● FORMAT / BC:	Full white control DATA depending on 16/9 selected format
● HDRV:	Horizontal deflection signal
● HTR1 / HTR2:	Heater voltage from the DST to CRT PCB
● LFB:	Line Fast Blanking
● MUTE :	Mutes audio amplifiers
● PO:	"Power ON " IP95 : reset activated and output = 8v "PO" = 5v when TV is working in normally
● POWER_FAIL:	Detection of mains supply and deflection stage failures
● RESET:	Microprocessor reset signal
● SAFETY:	Safety information from the deflection stage
● SCL:	Serial Clock
● SDA :	Serial Data
● SIF:	Sound IF
● TRAP_INFO:	31.4Mhz IF trap activation
● U_STANDBY:	Standby voltage
● U_DRIVER:	Horizontal sync signal from TDA8855H
● U_TIMER:	11v voltage used during "Switch ON " phase and "Wake Up" mode
● V FLB:	Vertical flyback reference for the microprocessor
● V GUARD:	Safety data generated by the vertical amplifier TDA 8351
● V_RETRACE:	42 / 48volts (depending on tube type) generated by the DST and used for vertical blanking
● V_SUPPLY:	13.5 to 15.5 volts (depending on tube type) generated by the DST

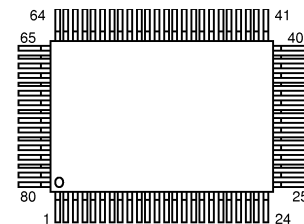
INTEGRATED CIRCUITS AND TRANSISTORS OUTLINE - CIRCUITS INTEGRES ET TRANSISTORS INTEGRIERTE SCHALTUNGEN UND TRANSISTOREN - CIRCUITI INTEGRATI TRANSISTOR CIRCUITOS INTEGRADOS Y TRANSISTORES



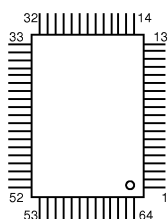
MPS3400C-PP-C6



MX27C200MC-12



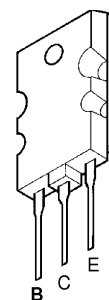
ST92R195



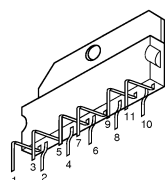
TDA8855H



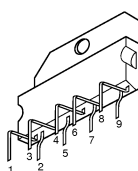
TDA8351



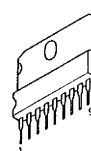
BUH516TH16



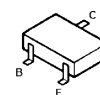
TDA7269



TDA6107Q



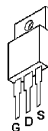
TDA 8139



BC 847B
BC 857B
BCR141
BCR191
DTC113ZK
DTC144EK
TN1401



ST24C08-M
TS3702CD



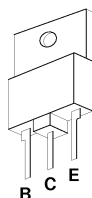
STP6 NA60F1



BT806 -600C



MC7812/CT



BD241C



BC 337
BC 546B
BC 547B



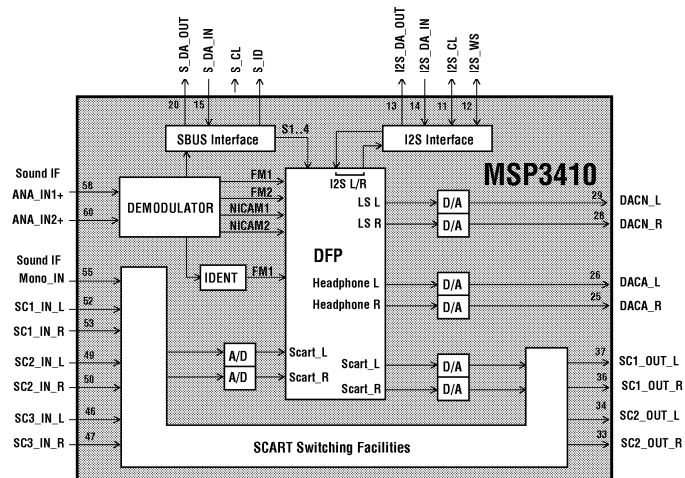
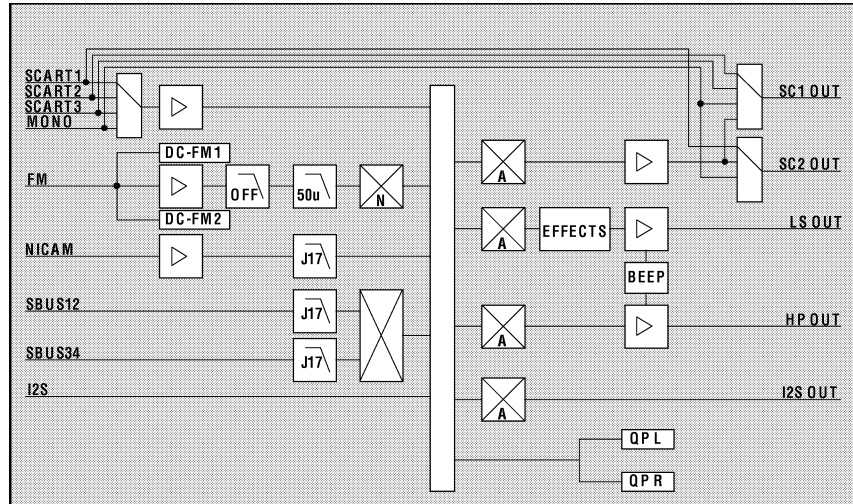
BF 422
BF423
2SA1020Y
2SC2236Y



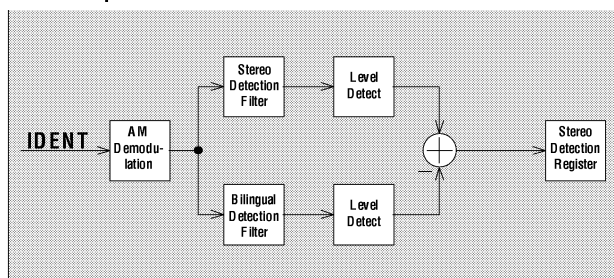
MPS750

INTEGRATED CIRCUITS BLOCK DIAGRAMS - SYNOPTIQUES INTERNES DES CIRCUITS INTEGRES - INTEGRIERTE SCHALTUNGEN BLOCKSCHALTBIlder SCHEMA A BLOCCHI DEI CIRCUITI INTEGRATI - VISTA INTERNA DE LOS CIRCUITOS INTEGRADOS

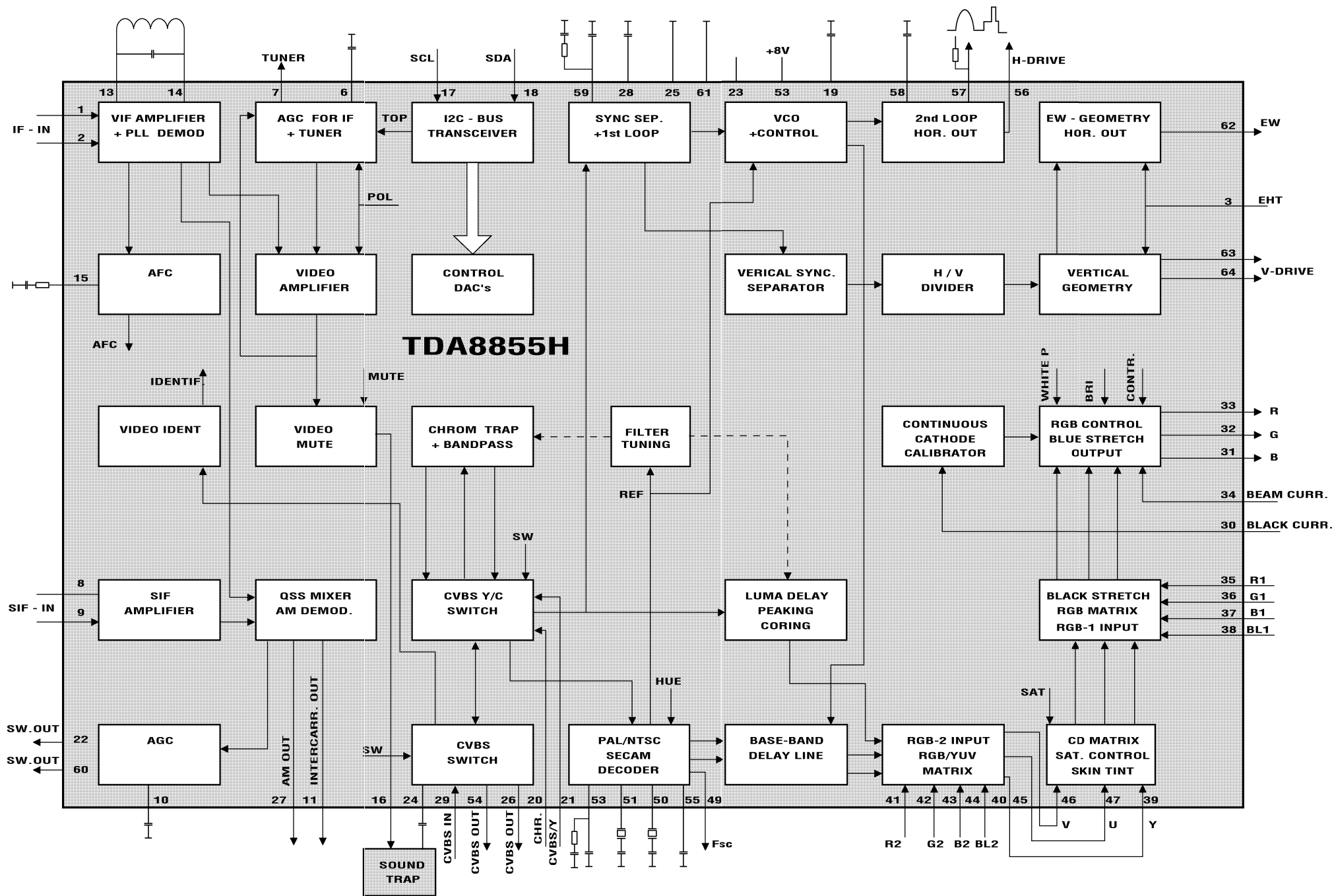
Audio baseband processing of the MSP3410



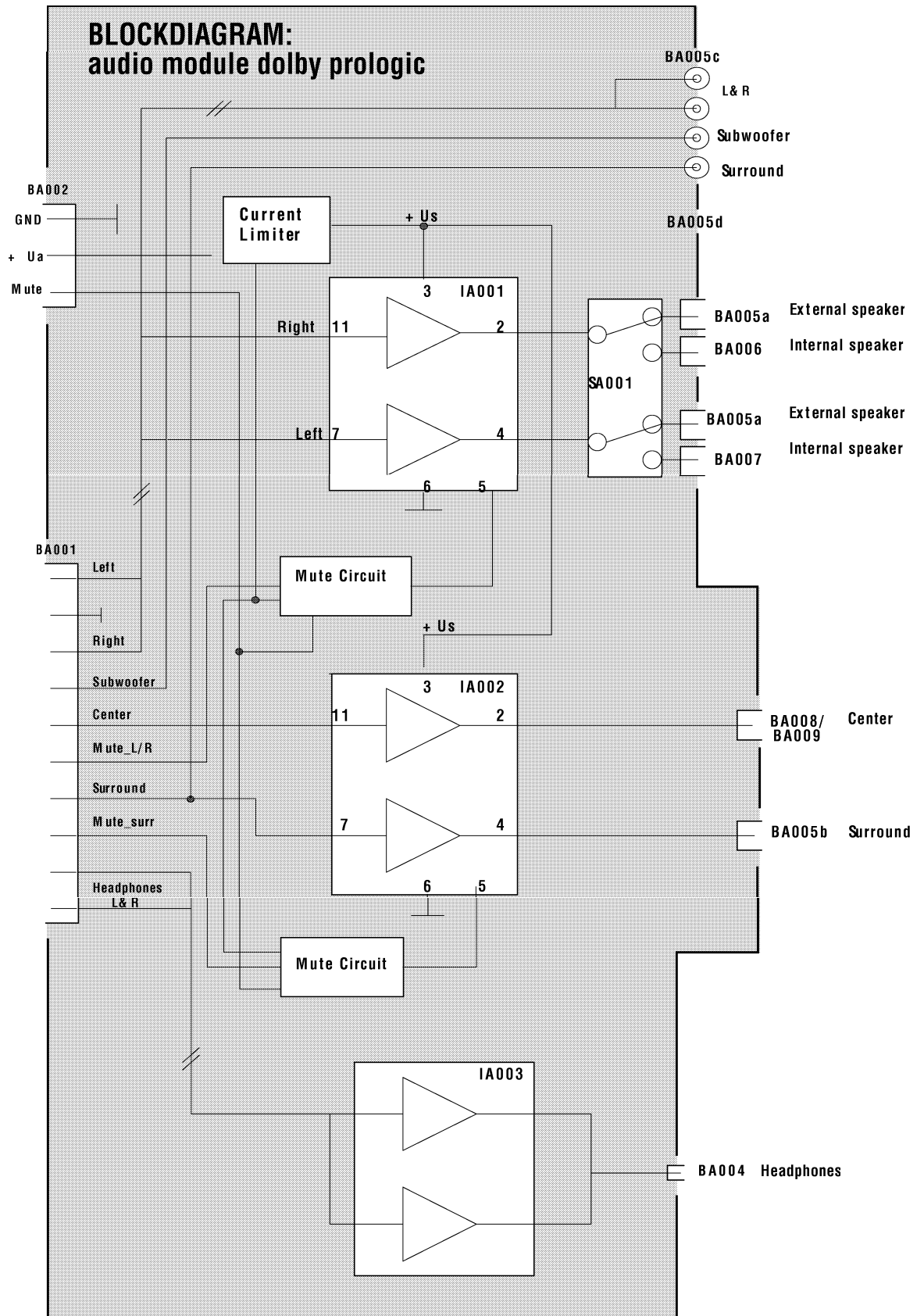
Detection part of the MSP 3410



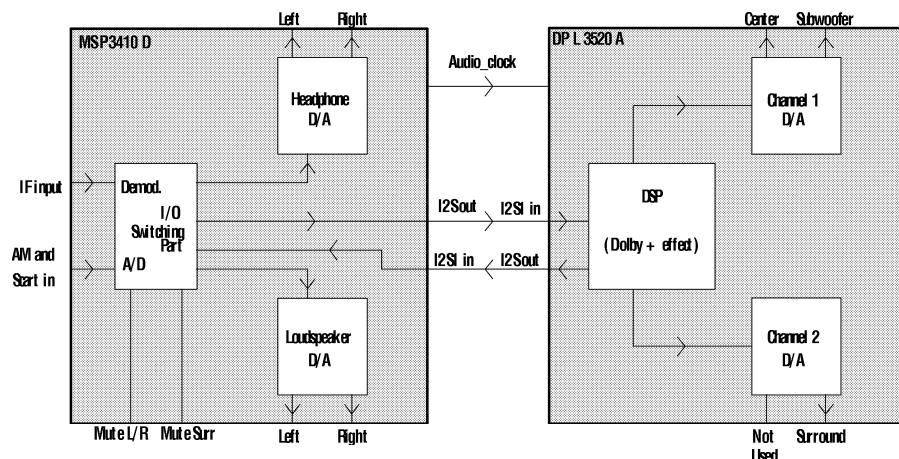
IV01 TDA 8855H



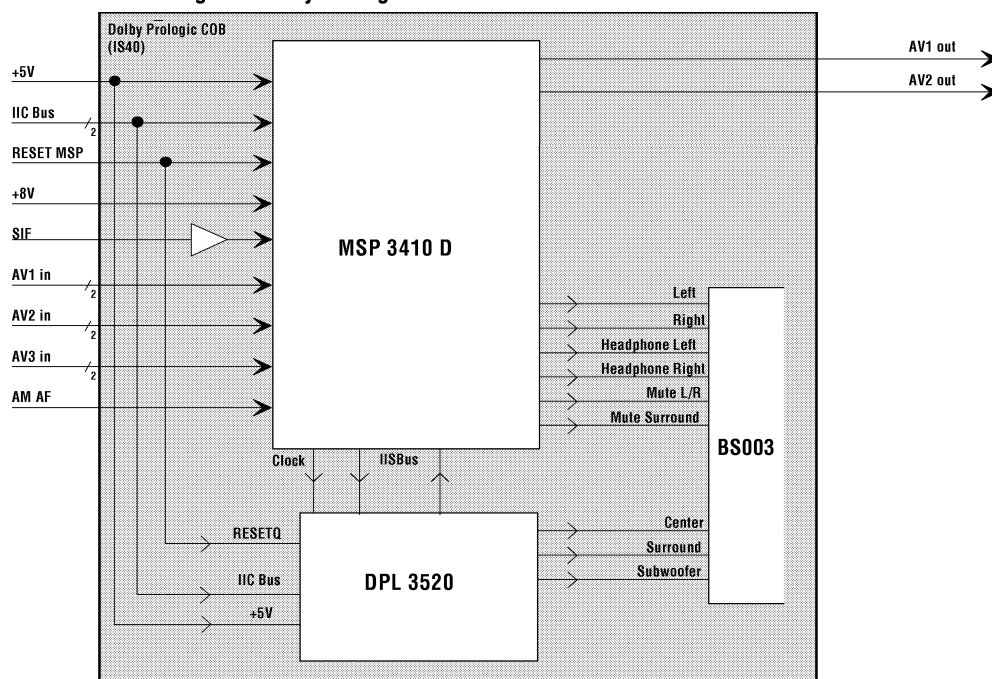
BLOCK DIAGRAM (AUDIO MODULE DOLBY PROLOGIC)
SCHEMA SYNOPTIQUE (AUDIO MODULE DOLBY PROLOGIC)
BLOCKSCHALTBIID (AUDIO MODULE DOLBY PROLOGIC)
SCHEMA A BLOCCI (AUDIO MODULE DOLBY PROLOGIC)
ESQUEMA DE BLOQUES (AUDIO MODULE DOLBY PROLOGIC)



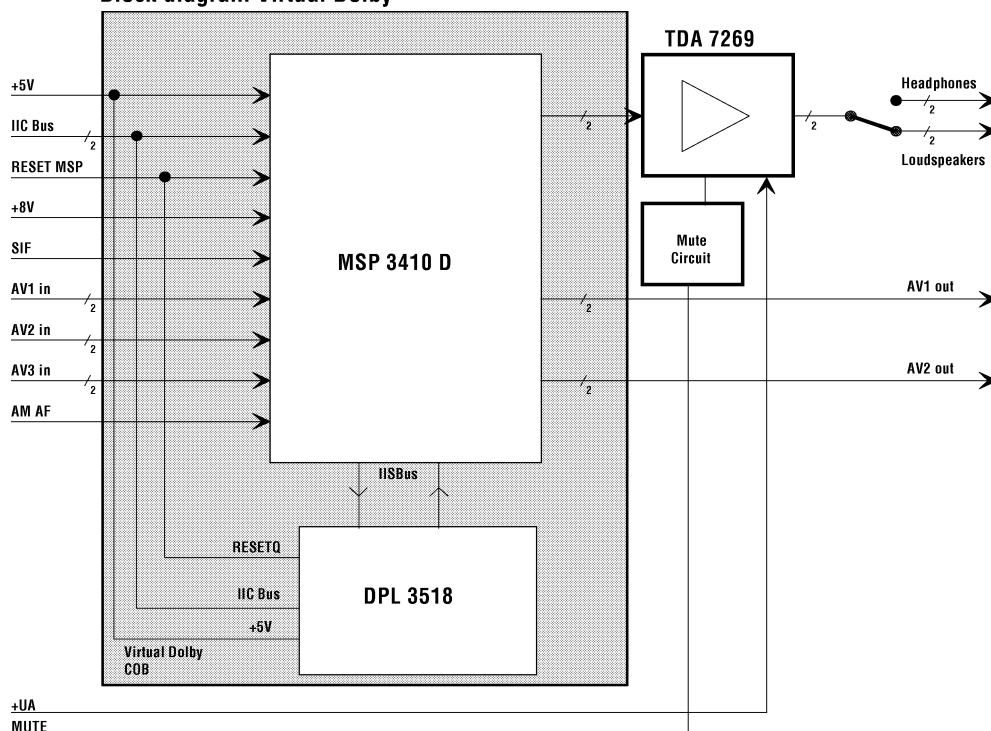
Interface requirement audio part with Dolby Prologic



Block diagram Dolby Prologic



Block diagram Virtual Dolby



EACEM - CÓDIGOS DE SECCIÓN

COMÚN	
ANT	SECCIÓN DE LA ANTENA
APR	PROCESADO DE SEÑALES (ANALÓGICO)
BCH	CARGA DE BATERÍA
CLK	SECCIÓN DE RELOJ
CPA	PROCESADO DE COLOR ANALÓGICO
CTR	PANEL DE CONTROL
DPR	PROCESADO DE SEÑALES (DIGITAL)
ERA	CIRCUITO DE BORRADO
FLX	PLACA FLEXIBLE
HFS	SECCIÓN DE ALTA FRECUENCIA
IDS	SECCIÓN DEL DISPLAY DE INFORMACIÓN
IFC	CIRCUITO FI
ILN	SECCIÓN i.LINK (IEEE1394)
INP	SECCIÓN DE ENTRADA DE SEÑALES
IRD	SECCIÓN INFRA-ROJOS (IRDA)
MEM	SECCIÓN DE MEMORIA
OUT	SECCIÓN DE SALIDA DE SEÑALES
PRG	SECCIÓN DE PROGRAMACIÓN
PRT	CIRCUITO DE PROTECCIÓN
PSU	ALIMENTACIÓN
PWA	SECCIÓN DEL AMP DE POTENCIA
REM	SECCIÓN DEL CONTROL REMOTO
RFU	AMPLIFICADOR/UNIDAD RF
SFT	SOFTWARE (CINTA/DISCO/ETC.)
SNS	UNIDAD DE DETECCIÓN
SVO	SECCIÓN DE SERVO
SYS	SECCIÓN DEL SISTEMA DE CONTROL
TUN	SECCIÓN DE SINTONIZACIÓN
TXT	PROCESADO DE TEXTOS
SONIDO	
APA	PROCESADO DE AUDIO ANALÓGICO
APD	PROCESADO DE AUDIO DIGITAL
CDC	SECCIÓN CAMBIADOR CD
CDS	SECCIÓN CD
MDC	SECCIÓN CAMBIADOR MD
MDS	SECCIÓN MINIDISC
MIC	SECCIÓN DE MICRÓFONO
PUD	DISPOSITIVO CAPTADOR
SHD	CABEZAS FIJAS
SPK	ALTAVOZ
IMAGEN	
CAM	CIRCUITO CÁMARA
CPD	PROCESADO DE COLOR DIGITAL
CRT	TUBO DE IMAGEN
DFL	CIRCUITO DE DEFLEXIÓN
DVD	SECCIÓN DVD
FPK	CONJUNTO DE ENFOQUE
IMG	UNIDAD DE VISUALIZACIÓN DE IMÁGENES

IMAGEN	
LCD	SECCIÓN LCD
LMP	SECCIÓN FLASH/LÁMPARA
VPA	PROCESADO DE VIDEO ANALÓGICO
VPD	PROCESADO DE VIDEO DIGITAL
VWF	VISOR
PC	
FDD	EXCITADOR DEL FLOPPY DISC
FMW	PROGRAMACIÓN FIJA
HDD	EXCITADOR DEL DISCO DURO
ISA	SECCIÓN ISA
JST	JOYSTICK
KBD	TECLADO
MDM	SECCIÓN MODEM
NIF	RED DE INTERCONEXIÓN
PAR	PUERTA PARALELO
PCC	TARJETA PC
PCI	SECCIÓN PCI
SCS	PUERTA SCSI
SER	PUERTA SERIE
USB	PUERTA USB
MECÁNICO	
ARM	MECANISMO DEL BRAZO
BZL	BEZEL (MUEBLE FRONTAL)
CBT	MUEBLE
CHA	CHASIS
DDM	SECCIÓN DE ACCIONAMIENTO DEL DISCO
EXC	CONECTOR EXTERNO
HCM	MECANISMO DE SOPORTE DE LA CABEZA
HOL	SOPORTE DE CASSETTE
INC	CONECTOR INTERNO
LDG	MECANISMO DE CARGA
LNМ	MECANISMO DE LENTE
PFM	MECANISMO DE ALIMENTACIÓN DEL PAPEL
PIN	RODILLO/PALANCA DE APRIETE
PRI	BLOQUE DE IMPRESOR
RFM	MECANISMO DE ALIMENTACIÓN DE LA CINTA
RHD	CABEZAS ROTATIVAS
SLD	MECANISMO DE SEGUIMIENTO
SRS	SECCIÓN DEL CARRETE DE SUMINISTRO
STA	BLOQUE ESTÁTICO
TDM	MECANISMO DE ACCIONAMIENTO DE LA CINTA
THR	MECANISMO DE ENHEBRADO
TNR	REGULADOR DE LA TENSIÓN DE LA CINTA
TPT	CAMINO DE LA CINTA
TRS	SECCIÓN DEL CARRETE DE RECOGIDA
WIR	CABLE
XXX	PIEZAS ESTÉTICAS

CÓDIGOS DE LOS DEFECTOS	
MECÁNICO	
A	GASTADO (O DEFECTO MECÁNICO EN GENERAL)
A1	ERROR DE FUNCIONAMIENTO
B	ENSUCIADO/MANCHADO
C	DESAJUSTADO MECÁNICAMENTE
D	CORTADO/DEFECTUOSO
E	DEFORMADO
F	ENGANCHADO/BLOQUEADO
G	RAYADO/ABOLLADO/BORDES CORTANTES
H	HENDIDURA/PELADO/CORROIDO/FUNDIDO
I	SEPARADO/SUELTO/RAYADO
J	INESTABILIDAD
K	PÉRDIDA (MECÁNICA)
L	SECO (SIN LUBRIFICANTE)
M	CUERPO EXTRAÑO
ELÉCTRICO	
N	COMPONENTE ELÉCTRICO/MÓDULO DEFECTUOSO
O	QUEMADO/FORMACIÓN DE ARCO/PIXELS QUE FALTAN
P	MAL AJUSTADO ELÉCTRICAMENTE/MAL AJUSTADO
Q	CORTOCIRCUITO
R	CIRCUITO ABIERTO
S	FUGA (ELÉCTRICA)
T	MAL CONTACTO/SOLDADURA
T1	MALA CONEXIÓN A TIERRA
U	CIRCUITO ABIERTO
V	PLACA HENDIDA
W	SOLDADURA SECA O QUE FALTA
X	SOLDADURA EN PUENTE
Y	MÓDULO/COMPONENTE EQUIVOCADO
Z	MÓDULO/COMPONENTE PERDIDO
1	PROBLEMA DE SOFTWARE
11	PÉRDIDA DE DATO DESDE LA MEMORIA
12	FALLO EN AJUSTE/INSTALACIÓN DE PROGRAMA
13	SOFTWARE DEFECTUOSO O INCOMPLETO
14	PROBLEMA DE AJUSTE DEL SOFTWARE
15	NO IDENTIFICA/VERIFICA EL PRODUCTO O EL USUARIO
2	AGOTADO/EMISIÓN DÉBIL
3	NO SE ENCUENTRA PROBLEMA (APARATO DENTRO DE ESPEC.)
4	NO SE ENCUENTRA PROBLEMA - EQUIVOCACIÓN DEL USUARIO
5	NO SE ENCUENTRA PROBLEMA - CONDICIONES LOCALES
51	FALLO EN LA TENSIÓN PRINCIPAL
6	IMPOSIBLE DIAGNOSTICAR FALLO
7	INCORRECTAMENTE CABLEADO/MONTADO
81	CONEXIÓN INCORRECTA DEL EQUIPO
9	MAL USO POR EL USUARIO
93	MODIFICACIÓN NO AUTORIZADA

CÓDIGOS DE REPARACIÓN	
A	SUBSTITUCIÓN
B	AJUSTE MECÁNICO
C	AJUSTE ELÉCTRICO
D	RESOLDADURA
D1	REPARACIÓN/RECOLOCAR EN SU SITIO (CONECTOR/TUBO/...)
E	LIMPIEZA
F	ENGRASE
G	COMPONENTES ELÉCTRICOS REPARADOS
H	COMPONENTES MECÁNICOS REPARADOS
I	MODIFICACIÓN SOLICITADA POR EL FABRICANTE
J	DESMONTADO
K	AÑADIDO
L	COMPROBACIÓN FUNCIONAL
M	MEDICIÓN DE ESPECIFICACIÓN
N	MANTENIMIENTO
O	REPULIR
P	SUBSTITUCIÓN PREVENTIVA DE COMPONENTES
Q	ACCIÓN PREVENTIVA SIN SUBSTITUCIÓN DE COMPONENTES
U	EXPLICACIÓN AÑADIDA
V	PRESUPUESTO RECHAZADO
W	PRESUPUESTO CON COMPONENTES
X	PRESUPUESTO SIN COMPONENTES
Y	VUELTO AL CLIENTE SIN REPARACIÓN
Z	CAMBIO DEL APARATO
Z1	CAMBIO DE PRODUCTO (REPARACIÓN MUY CARA)
Z2	CAMBIO DE PRODUCTO (MUCHAS VISITAS/REPARACIONES)
Z3	CAMBIO DE PRODUCTO (REPUESTO NO OBTENIBLE)
Z4	CAMBIO DE PRODUCTO (IMPOSIBLE DE REPARAR)
Z5	CAMBIO DE PRODUCTO (SOLICITADO AL DETALLISTA)
Z6	CAMBIO DE PRODUCTO (SOLICITADO POR EL FABRICANTE)
1	CORRECCIÓN DEL SOFTWARE/REAJUSTE
2	ACTUALIZACIÓN DEL SOFTWARE
3	PRODUCTO ACTUALIZADO (SOBRE PEDIDO)

EJEMPLO:																					
BANDEROLA	CÓDIGO DE SÍNTOMA	CÓDIGO DE REPUESTO										NÚMERO DE REFERENCIA		SECCIÓN	PLACA	CÓDIGO DE DEFECTO	CÓDIGO DE REPARACIÓN	CANTIDAD			
1	1 4 1 2 3 6 4 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 4 5 6 7 8 9 X X X X X X X X X X	R	1 2 3	1 1	T D M	Y A 2 2	C 1	Z 1	. .										

TECHNICAL INFORMATION

Chassis concerned : ICC17 (25"MP & 28"MP)

Symptom/ Problem observed :

Spare Parts List, component part number amendment.

Solution implemented :

To optimize the CRT heater supply voltage for the above mentioned tubes, both LL05(DST) and LB02 (coil) have been changed.

LL05 : Old Part No. 10546610 ---> **New Part No. 10600190**

LB02 : Old Part No. 10477930 ---> **New Part No. 25349470**

Comment :

Both components must be replaced at the same time.

TECHNICAL INFORMATION

Finished products / Chassis concerned :
All TV sets equipped with ICC17 chassis (CRT Board)

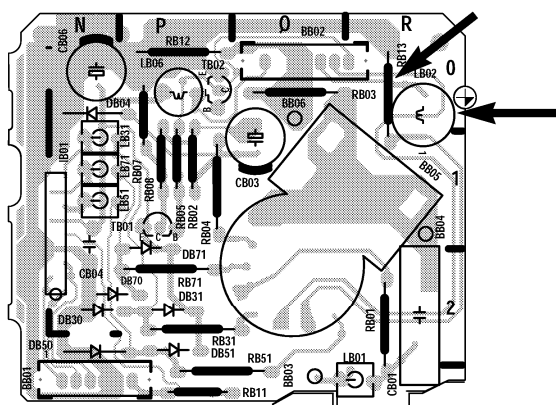
Subject : Protection of transistor TB02 against arcing

Symptom/ Problem observed :
Transistor type number BF422 used in position TB02 found defective.

Cause :
Arcing.

Solution implemented :

- Remove the resistor at location RB13.
- On the copper side of the CRT PCB, add an insulated wire link between pin 1 of inductor LB02 and pin 4 of the CRT socket (ground).



IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

Condition/ Symptom	Part No	Qty	Position	Section	Fault Code	Repair Code
1 3 1 5			R B 1 3	V P A	Y	T

You do not need to write anything in the white boxes.

TECHNICAL INFORMATION

Chassis concerned : ICC17

Symptom/ Problem observed :

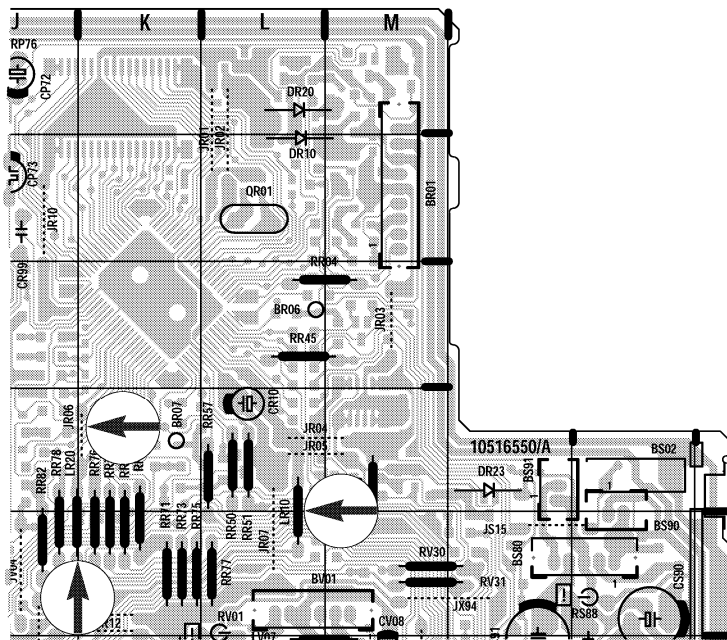
Moiré patterning visible on some channels.

Cause :

High frequency cross modulation.

Solution implemented

- Remove the jumper link at location JR06.
- Remove the inductor at location LR20.
- Replace LR10 10 μ H inductor with a jumper link.



TECHNICAL INFORMATION

Chassis concerned : ICC17

Problem observed :

Different symptoms can be observed

- TV stuck in the Standby Mode with the safety mode active (code 27).
- Unstable OSD graphics.
- Sporadic or intermittent vertical scan.

Cause :

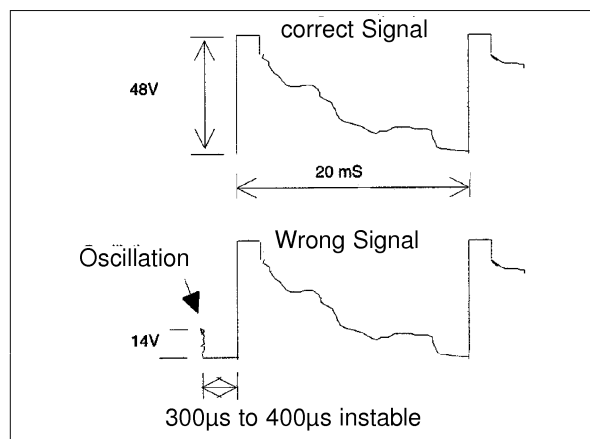
Parasitic oscillation at pin 7 of IF01 (see attached)

Solution implemented :

The problem is still under investigation to identify the basic cause of the problem, but to initially overcome the problem we recommend changing the following components:

- Change RF08 from 4.7Ω or 27Ω to $68\Omega \pm 5\%$ 0.700w Part No. 15009050.
- Change CF08 from 100nF to 220nF 20% 63V Part No. 43302770.

If problem is still not resolved after changing the above mentioned resistors the replace IF01.



IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

Condition/ Symptom	Part No	Qty	Position	Section	Fault Code	Repair Code
1 1 1 9	1 5 0 0 9 0 5 0	0 1	R F 0 8	D F L	Y	A
	4 3 3 0 2 7 7 0	0 1	C F 0 8	D F L	Y	A

You do not need to write anything in the white boxes.



TECHNICAL INFORMATION

Chassis concerned : ICC17 (with PCB index 02)

Problem observed :

The TV will not come out the Standby Mode.

Cause :

When starting, the base drive current to TP50 is too low.

Solution implemented :

Change the diode in position DP39 (LL4148) to a resistor strap Part No. 41047950.

IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

Condition/ Symptom	Part No	Qty	Position	Section	Fault Code	Repair Code
1119	41047950	01	DP39	PSU	Y	A

You do not need to write anything in the white boxes.

TECHNICAL INFORMATION

Chassis concerned : ICC17

Problem observed :

At switch "ON", the TV's standby power supply does not work.

Cause :

The reverse voltage of the diodes used in positions DP16/17/18/19 (1N4001) is too low especially when the mains voltage is at highest.

Solution implemented :

Change the diodes used in positions DP16/17/18/19 with higher reverse breakdown voltage (400V) type number 1N4004, Part No. 44009009.

IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

Condition/ Symptom	Part No	Qty	Position	Section	Fault Code	Repair Code
1 1 1 9	4 4 0 0 9 0 0 9	0 1	D P 1 6	P S U	Y	A
	4 4 0 0 9 0 0 9	0 1	D P 1 7	P S U	Y	A
	4 4 0 0 9 0 0 9	0 1	D P 1 8	P S U	Y	A
	4 4 0 0 9 0 0 9	0 1	D P 1 9	P S U	Y	A

You do not need to write anything in the white boxes.

TECHNICAL INFORMATION

Chassis concerned : ICC17 (with PCB index 02)

Problem observed : .

East/West correction circuit failure.

Cause :

The transistor used in position TL41 (BD241C) is damaged due to CRT flashover.

Solution implemented :

After replacement TL41, add a RGP10G protection diode in position DL41 in parallel with TL41 (cathode to the collector of TL41 and the anode to ground), Part No. 10459090.

IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

Condition/ Symptom	Part No	Qty	Position	Section	Fault Code	Repair Code
3335	10459090	01	DL41	DFL	Z	K

You do not need to write anything in the white boxes.



TECHNICAL INFORMATION

Chassis concerned : ICC17

Subject : Improvement of the reception with internal antenna

Problem observed :

Moiré patterning, mainly visible on VHF channels.

Cause:

Inference being caused by the switch mode power supplies when using a set top aerial.

Solution implemented :

Change the value of capacitor CP49 from 1.5nF into 3.3nF 20% 1.6KV code 10607950.

Please change the following components in order to change the frequency of operation of the power as follows :

- Capacitor CP16/CP17 from 220nF to a 470nF 20% 275V Part No. 10596570.
- Capacitor CP41 from 10nF 63V to a 10nF 10% 100V Part No. 70427750.
- Resistor RP53 from 5.6kΩ to a 5.1kΩ 5% 0.100W Part No. 30611700.
- Resistor RP56 from 10kΩ to a 2.2kΩ 5% 0.100W Part No. 40077900.

IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

Condition/ Symptom	Part No	Qty	Position	Section	Fault Code	Repair Code
1 2 2 4	1 0 6 0 7 9 5 0	0 1	C P 4 9	P S U	Y	A
	1 0 5 9 6 5 7 0	0 1	C P 1 6	P S U	Y	A
	1 0 5 9 6 5 7 0	0 1	C P 1 7	P S U	Y	A
	7 0 4 2 7 7 5 0	0 1	C P 4 1	P S U	Y	A
	3 0 6 1 1 7 0 0	0 1	R P 5 3	P S U	Y	A
	4 0 0 7 7 9 0 0	0 1	R P 5 6	P S U	Y	A

You do not need to write anything in the white boxes. ☐

TECHNICAL INFORMATION

Chassis concerned : ICC17

Problem observed :

Visible flash over after quickly switch Off and On again.

Solution implemented :

Change the value of capacitor CI57 from 2.2μF to a 1μF 20% 100V, Part No. 256728.

IRIS CODE: the code mentioned below must be used to report this failure on the warranty sheet. It will make your report easier and more reliable

Condition/ Symptom	Part No	Qty	Position	Section	Fault Code	Repair Code
1321	256728	01	CI57	APR	Y	A

You do not need to write anything in the white boxes.

GENERAL INFORMATION

METHODOLOGY

1 - ON POWER-UP :

- Observe the behaviour of the two-coloured LED: note the various stages and compare them to the normal cycle.
By doing this, the time at which the problem arose and the part of the circuit which needs to be investigated can be identified.

2 -TROUBLE SHOOTING PROCEDURE: LED BEHAVIOUR

In certain cases the LED will flash when transmitting a message:

LED flashing : message being transmitted.

Count the flashes : code is two bursts separated by a pause of 0.7 s and repeated several times.

See the error code table.



**LIST OF LED MESSAGE
ERROR CODES**

This data is more precise than colour changes but still incomplete, since various causes may generate the same code.

3 - FAULT FINDING :

Carryout of stages 1 and 2: an oscilloscope test may clarify the code transmitted in stage two.

a - The television set operates fully or partially

- Use LED message observation fault finding methods 1 and 2. See also the faults listed relating to fault finding by symptom.

b - The television goes into permanent or cyclical security mode

- Observe LED's behaviour (flashing red, stable orange followed by flashing, etc.).
Select the relevant box in the column (LED behaviour fault finding).

POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN

(5) : standby

Note :
During measurements in the power supply unit

- Use the primary power unit ground (PGND).

Attention :

Mesure dans le bloc alimentation
- Utiliser la masse du bloc alimentation
(PGND).

Achtung :

Bei Messungen im Primärnetzteil
- Primärnetzteilmasse verwenden
(PGND).

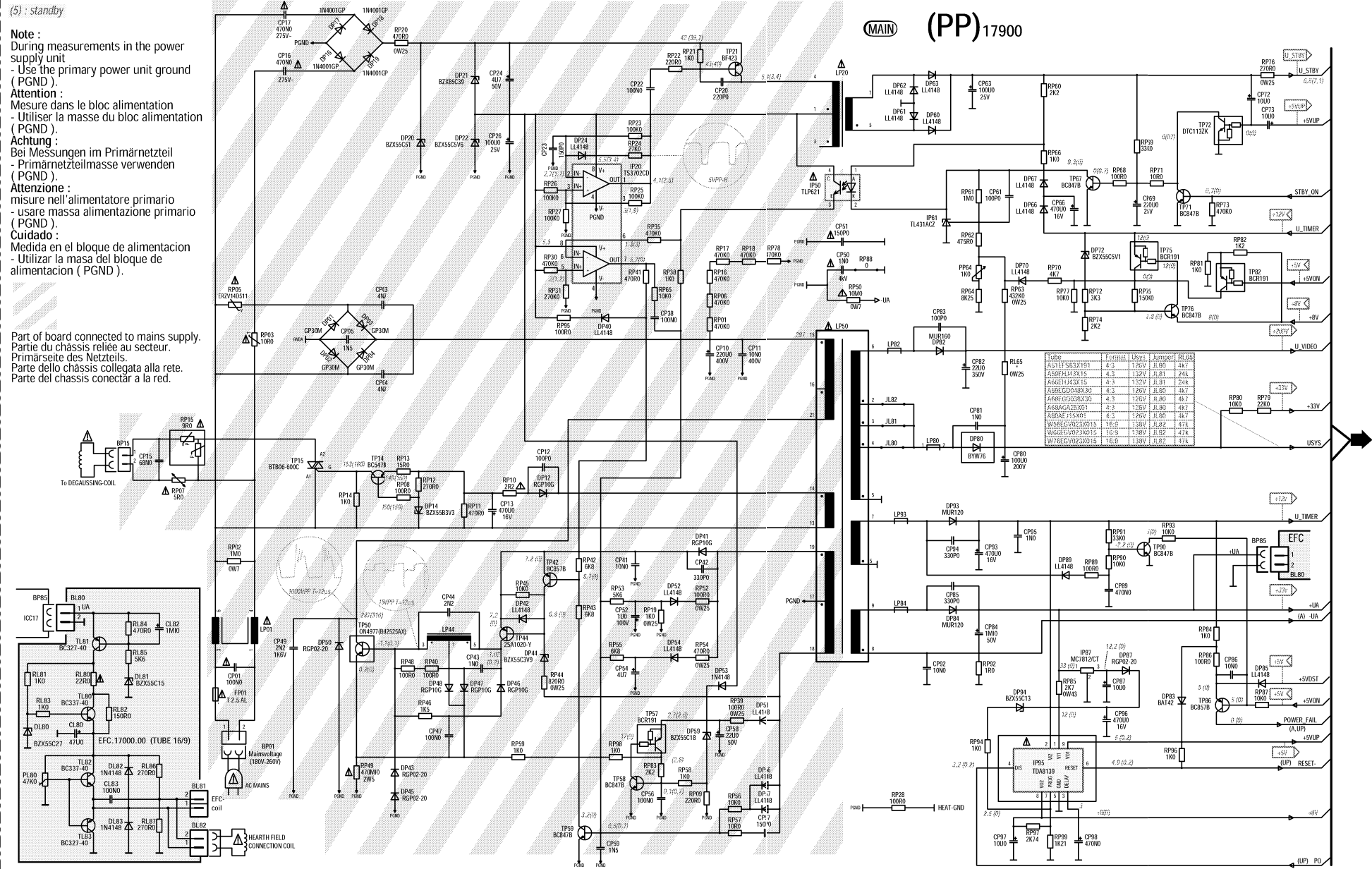
Attenzione

misure nell'alimentatore primario
- usare massa alimentazione primario
(PGND).

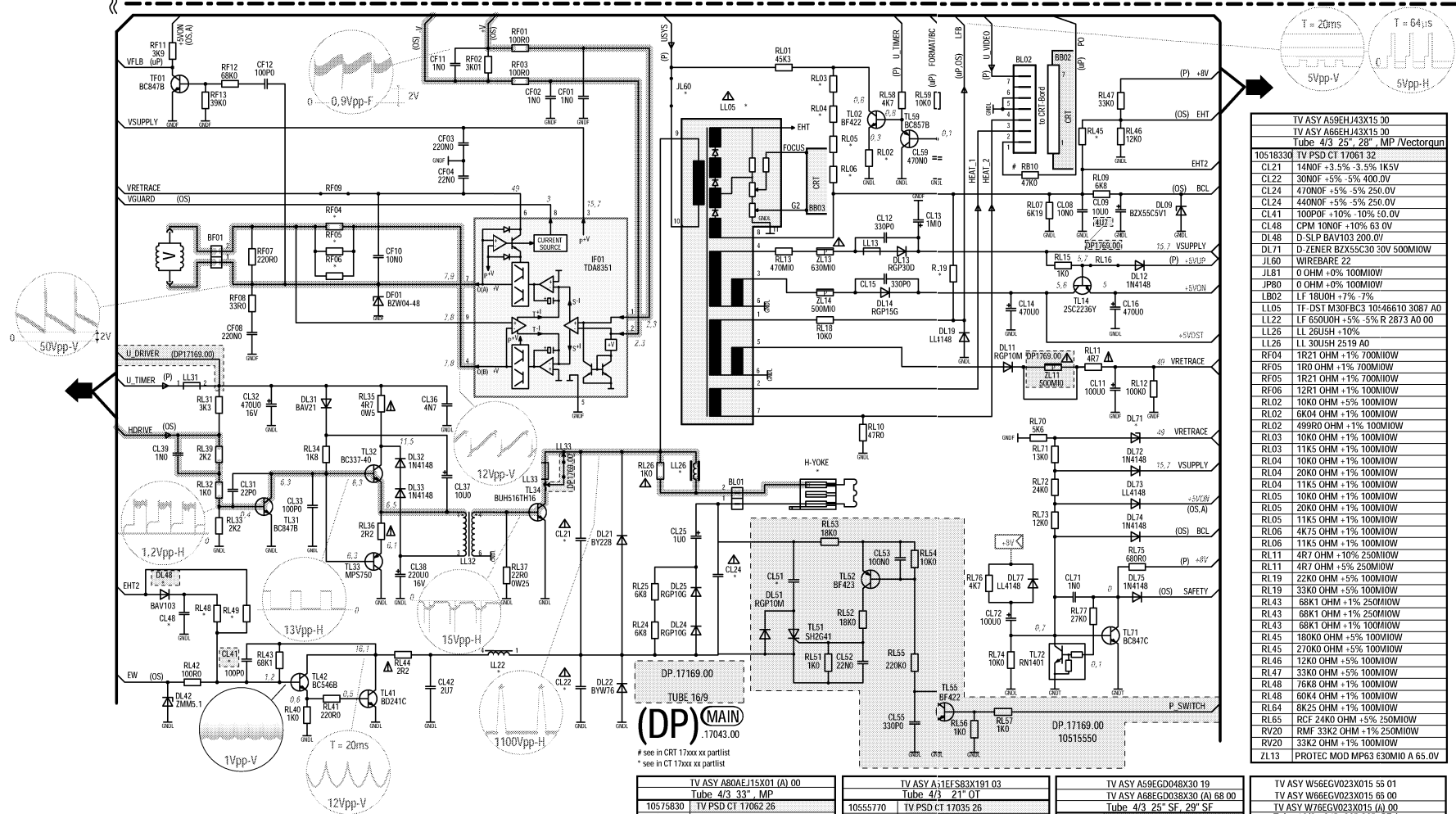
Cuidado:
Medida de

Medida en el bloque de alimentacion
- Utilizar la masa del bloque de alimentacion (PGND).

Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello chassis collegata alla rete.
Parte del chassis conectar a la red.



 Use isolating mains transformer - Utiliser un transformateur isolateur du secteur - Einen Trenntrafo verwenden
Utilizar un transformador aislador de red - Utilizzare un trasformatore per isolarvi dalla rete



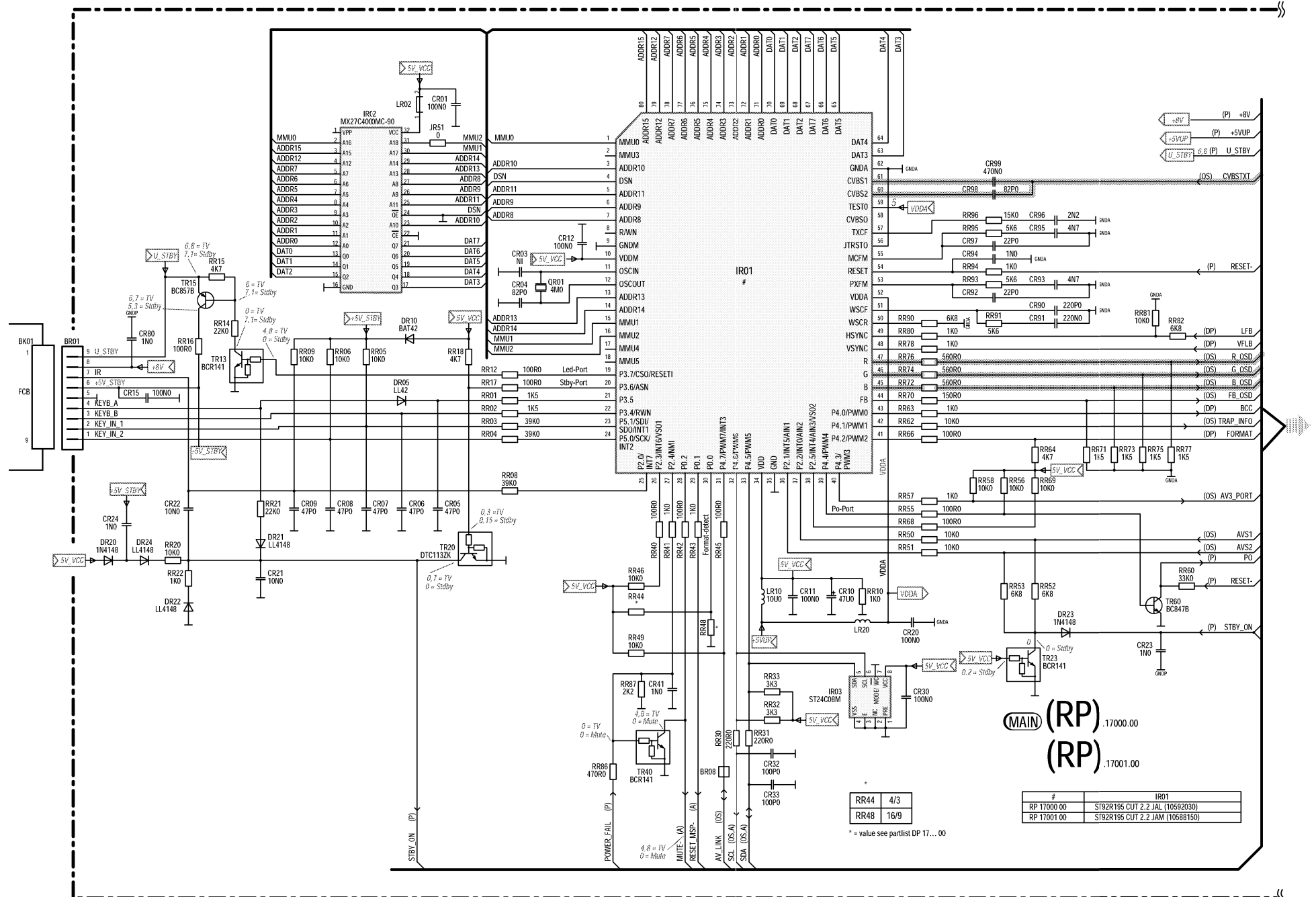
⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

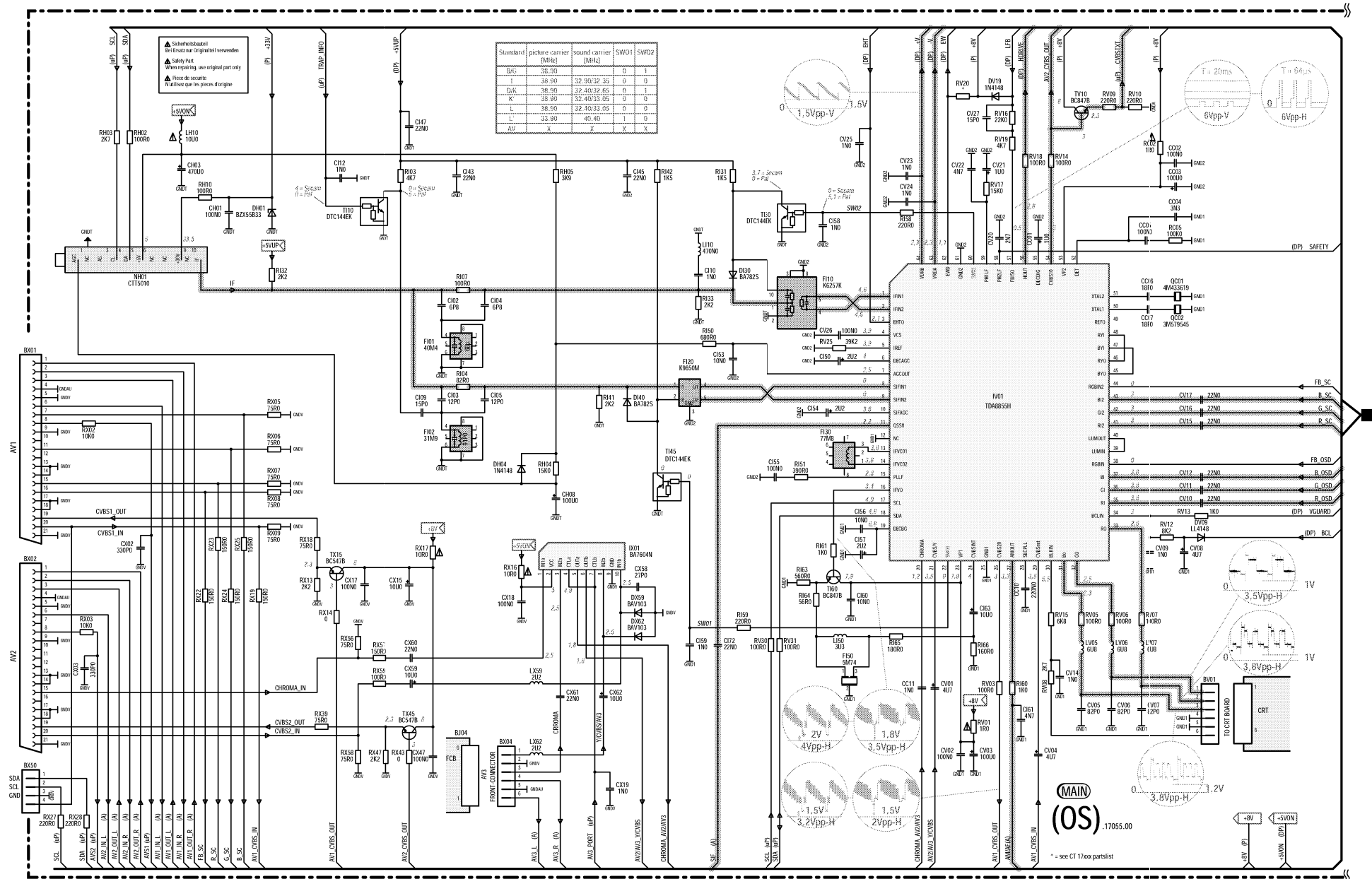
Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraîne la non-conformité de l'appareil.
Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) durch nicht normgerechte Teile ersetzt werden, erlischt die Haftung des Herstellers.

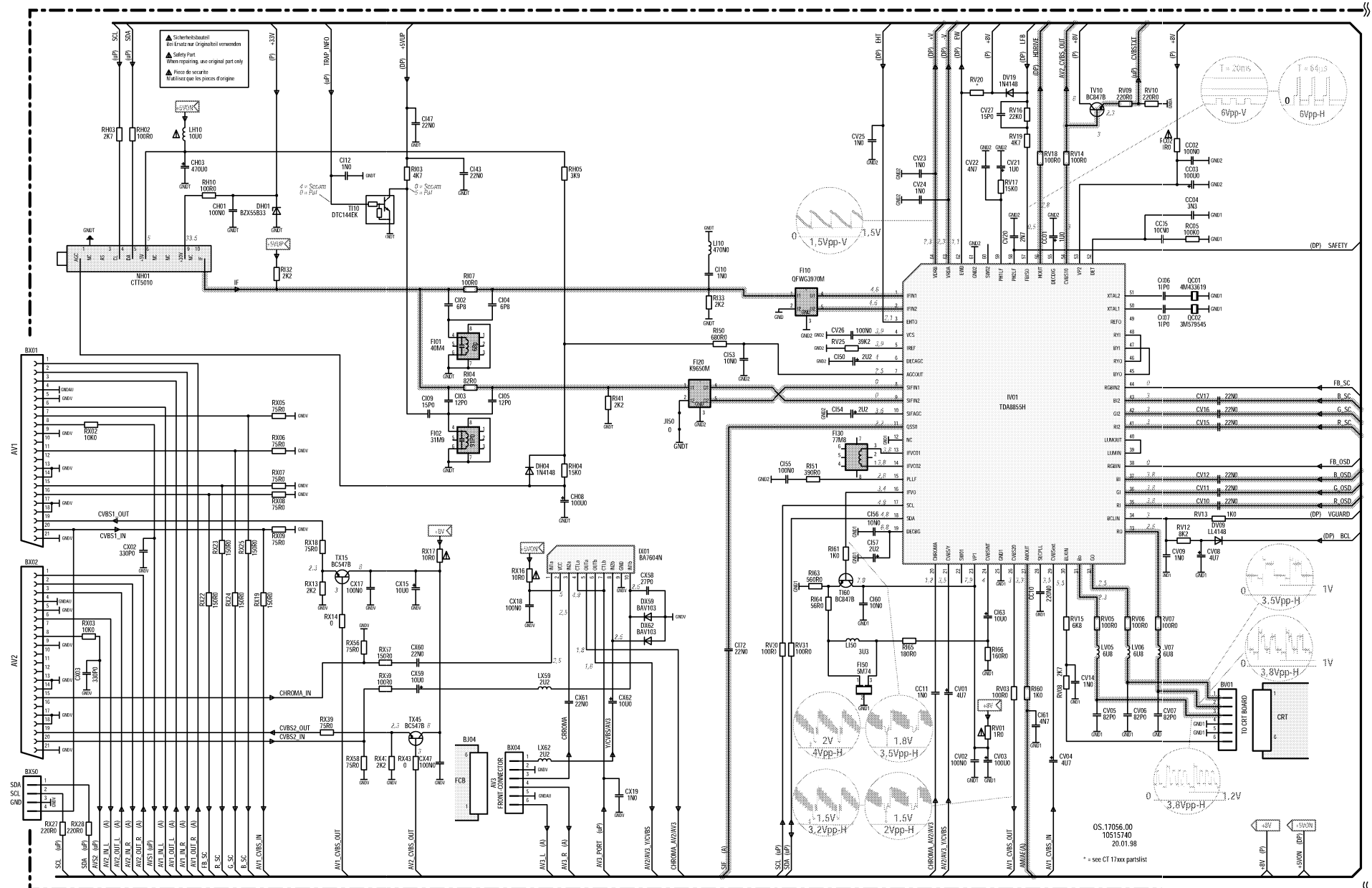
La sostituzione degli elementi di sicurezza (contrassegnati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformità dell'apparecchio.
In tal caso è "esclusa la responsabilità" del costruttore.

La substitución de elementos de seguridad (marcados con el símbolo ⚠) por componentes no homologados según la norma CEI 65, provoca la no conformidad del aparato.
En ese caso, el fabricante cesa de ser responsable.





RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR/TRATAMENTO VIDEO



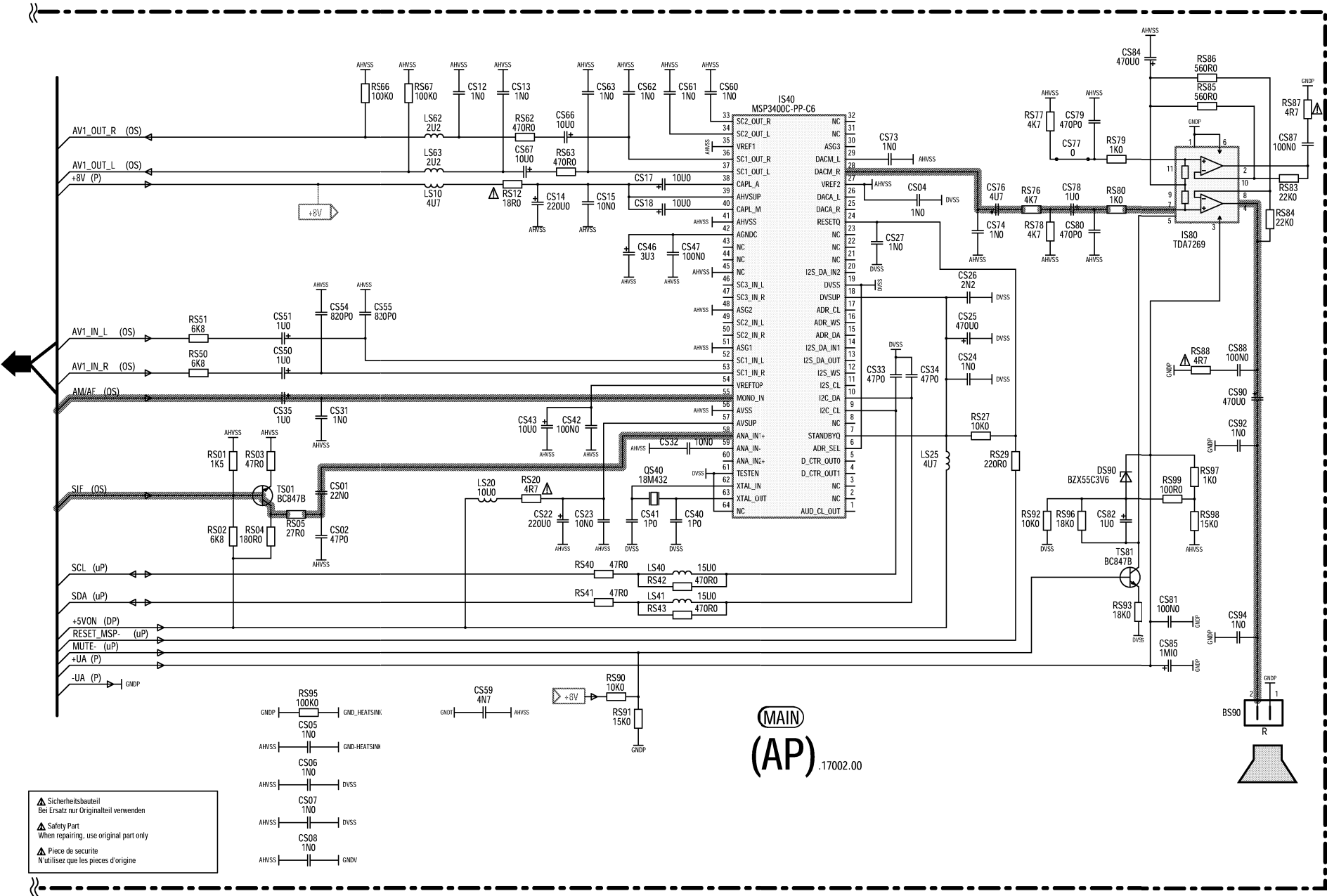
MAIN (AP)
1'000.00
(FM-Stereo)

Sicherheitsteil
Bei Ersatz nur Originalteile verwenden
Safety Part
When repairing, use original part only
Piece de securite
N'utilisez que les pieces d'origine

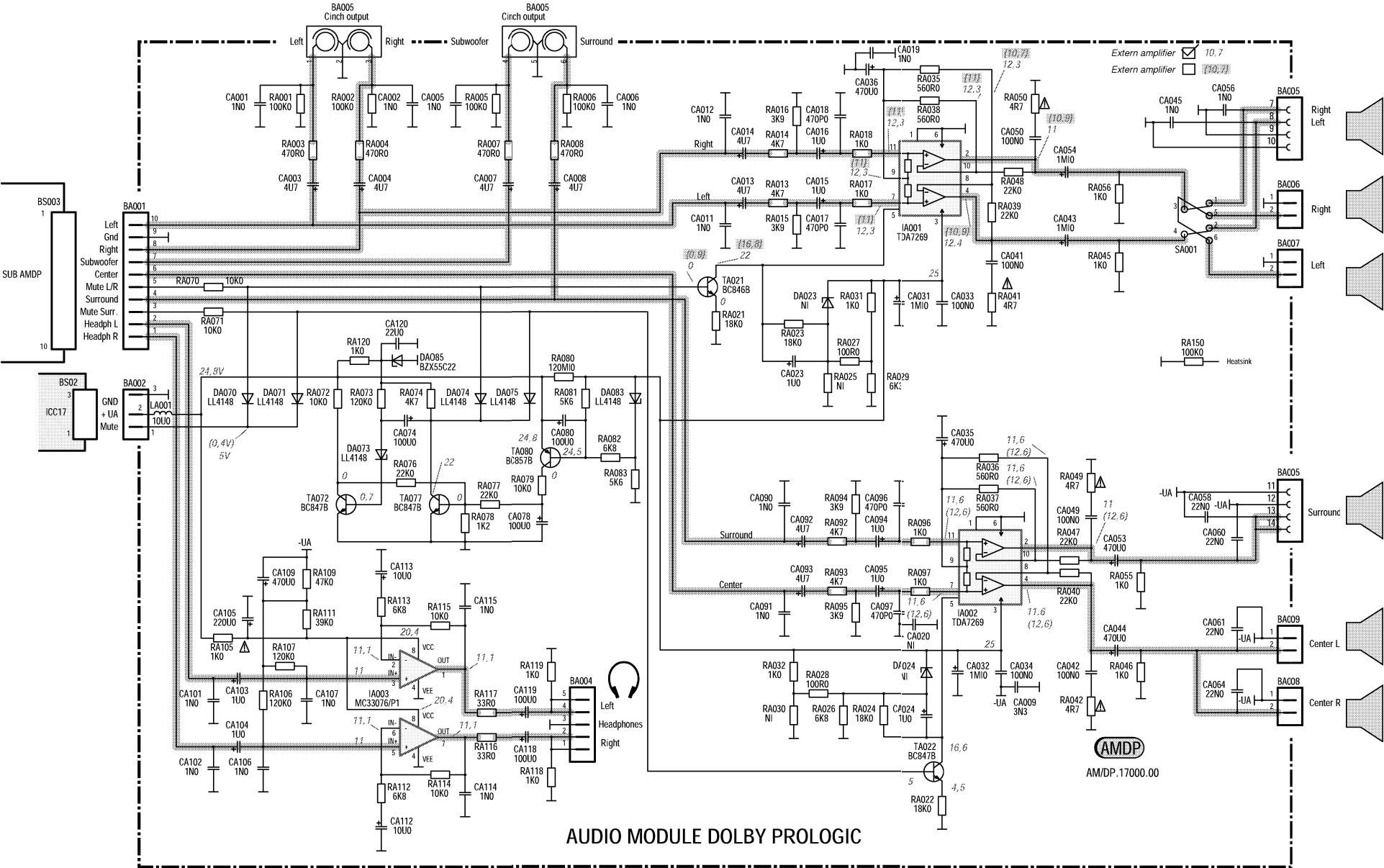
VIRTUAL DOLBY
IS40 = SUB AMPD 19100 00 => VIRTUAL DOLBY
= SUB AMPD 17001 00 => DOLBY PROLOGIC
= MSP 34100-PP => STEREO / NICAM
= MSP 3400C-PP-C5 => STEREO 2X10W

Components and Values:
 - Resistors: RS64 100K, RS65 100K, RS66 100K, RS67 100K, RS68 100K, RS69 100K, RS70 100K, RS71 100K, RS72 100K, RS73 100K, RS74 100K, RS75 100K, RS76 100K, RS77 100K, RS78 100K, RS79 100K, RS80 100K, RS81 100K, RS82 100K, RS83 100K, RS84 100K, RS85 100K, RS86 100K, RS87 100K, RS88 100K, RS89 100K, RS90 100K, RS91 100K, RS92 100K, RS93 100K, RS94 100K, RS95 100K, RS96 100K, RS97 100K, RS98 100K, RS99 100K, RS01 1K, RS02 6K, RS03 47R, RS04 180R, RS05 27R, RS06 47P, RS07 1N, RS08 1N, RS09 1N, RS10 4U7, RS11 18R, RS12 18R, RS13 220U, RS14 10N, RS15 10N, RS16 10N, RS17 10U, RS18 10U, RS19 10U, RS20 4R7, RS21 220U, RS22 10N, RS23 10N, RS24 10N, RS25 470U, RS26 2N2, RS27 10K, RS28 220R, RS29 220R, RS30 1K, RS31 1N, RS32 10N, RS33 47P, RS34 47P, RS35 1U, RS36 470P, RS37 820P, RS38 820P, RS39 470P, RS40 47R, RS41 47R, RS42 47R, RS43 47R, RS44 15U, RS45 15U, RS46 47R, RS47 47R, RS48 15U, RS49 15U, RS50 6K, RS51 6K, RS52 6K, RS53 6K, RS54 6K, RS55 6K, RS56 6K, RS57 6K, RS58 6K, RS59 6K, RS60 6K, RS61 6K, RS62 6K, RS63 6K, RS64 6K, RS65 6K, RS66 6K, RS67 6K, RS68 6K, RS69 6K, RS70 6K, RS71 6K, RS72 6K, RS73 6K, RS74 6K, RS75 6K, RS76 6K, RS77 6K, RS78 6K, RS79 6K, RS80 6K, RS81 6K, RS82 6K, RS83 6K, RS84 6K, RS85 6K, RS86 6K, RS87 6K, RS88 6K, RS89 6K, RS90 6K, RS91 6K, RS92 6K, RS93 6K, RS94 6K, RS95 6K, RS96 6K, RS97 6K, RS98 6K, RS99 6K, RS00 6K.
 - Capacitors: CS01 22N, CS02 47P, CS03 1N, CS04 1N, CS05 1N, CS06 1N, CS07 1N, CS08 1N, CS09 1N, CS10 4U7, CS11 18R, CS12 18R, CS13 220U, CS14 10N, CS15 10N, CS16 10N, CS17 10U, CS18 10U, CS19 10U, CS20 4R7, CS21 220U, CS22 10N, CS23 10N, CS24 10N, CS25 470U, CS26 2N2, CS27 10K, CS28 220R, CS29 220R, CS30 1K, CS31 1N, CS32 10N, CS33 47P, CS34 47P, CS35 1U, CS36 470P, CS37 820P, CS38 820P, CS39 470P, CS40 47R, CS41 47R, CS42 47R, CS43 47R, CS44 15U, CS45 15U, CS46 47R, CS47 47R, CS48 15U, CS49 15U, CS50 6K, CS51 6K, CS52 6K, CS53 6K, CS54 6K, CS55 6K, CS56 6K, CS57 6K, CS58 6K, CS59 6K, CS60 6K, CS61 6K, CS62 6K, CS63 6K, CS64 6K, CS65 6K, CS66 6K, CS67 6K, CS68 6K, CS69 6K, CS70 6K, CS71 6K, CS72 6K, CS73 6K, CS74 6K, CS75 6K, CS76 6K, CS77 6K, CS78 6K, CS79 6K, CS80 6K, CS81 6K, CS82 6K, CS83 6K, CS84 6K, CS85 6K, CS86 6K, CS87 6K, CS88 6K, CS89 6K, CS90 6K, CS91 6K, CS92 6K, CS93 6K, CS94 6K, CS95 6K, CS96 6K, CS97 6K, CS98 6K, CS99 6K, CS00 6K.
 - Inductors: LS01 2U, LS02 2U, LS03 2U, LS04 2U, LS05 2U, LS06 2U, LS07 2U, LS08 2U, LS09 2U, LS10 4U7, LS11 18R, LS12 18R, LS13 220U, LS14 10N, LS15 10N, LS16 10N, LS17 10U, LS18 10U, LS19 10U, LS20 4R7, LS21 220U, LS22 10N, LS23 10N, LS24 10N, LS25 470U, LS26 2N2, LS27 10K, LS28 220R, LS29 220R, LS30 1K, LS31 1N, LS32 10N, LS33 47P, LS34 47P, LS35 1U, LS36 470P, LS37 820P, LS38 820P, LS39 470P, LS40 47R, LS41 47R, LS42 47R, LS43 47R, LS44 15U, LS45 15U, LS46 47R, LS47 47R, LS48 15U, LS49 15U, LS50 6K, LS51 6K, LS52 6K, LS53 6K, LS54 6K, LS55 6K, LS56 6K, LS57 6K, LS58 6K, LS59 6K, LS60 6K, LS61 6K, LS62 6K, LS63 6K, LS64 6K, LS65 6K, LS66 6K, LS67 6K, LS68 6K, LS69 6K, LS70 6K, LS71 6K, LS72 6K, LS73 6K, LS74 6K, LS75 6K, LS76 6K, LS77 6K, LS78 6K, LS79 6K, LS80 6K, LS81 6K, LS82 6K, LS83 6K, LS84 6K, LS85 6K, LS86 6K, LS87 6K, LS88 6K, LS89 6K, LS90 6K, LS91 6K, LS92 6K, LS93 6K, LS94 6K, LS95 6K, LS96 6K, LS97 6K, LS98 6K, LS99 6K, LS00 6K.
 - ICs: TS01 BC847B, TS81 BC847B, MSP3400C-PP-C6, IS40, IS41, IS42, IS43, IS44, IS45, IS46, IS47, IS48, IS49, IS50, IS51, IS52, IS53, IS54, IS55, IS56, IS57, IS58, IS59, IS60, IS61, IS62, IS63, IS64, IS65, IS66, IS67, IS68, IS69, IS70, IS71, IS72, IS73, IS74, IS75, IS76, IS77, IS78, IS79, IS80, IS81, IS82, IS83, IS84, IS85, IS86, IS87, IS88, IS89, IS90, IS91, IS92, IS93, IS94, IS95, IS96, IS97, IS98, IS99, IS00.
 - Other: BS02, BS03, BS04, BS05, BS06, BS07, BS08, BS09, BS10, BS11, BS12, BS13, BS14, BS15, BS16, BS17, BS18, BS19, BS20, BS21, BS22, BS23, BS24, BS25, BS26, BS27, BS28, BS29, BS30, BS31, BS32, BS33, BS34, BS35, BS36, BS37, BS38, BS39, BS40, BS41, BS42, BS43, BS44, BS45, BS46, BS47, BS48, BS49, BS50, BS51, BS52, BS53, BS54, BS55, BS56, BS57, BS58, BS59, BS60, BS61, BS62, BS63, BS64, BS65, BS66, BS67, BS68, BS69, BS70, BS71, BS72, BS73, BS74, BS75, BS76, BS77, BS78, BS79, BS80, BS81, BS82, BS83, BS84, BS85, BS86, BS87, BS88, BS89, BS90, BS91, BS92, BS93, BS94, BS95, BS96, BS97, BS98, BS99, BS00.

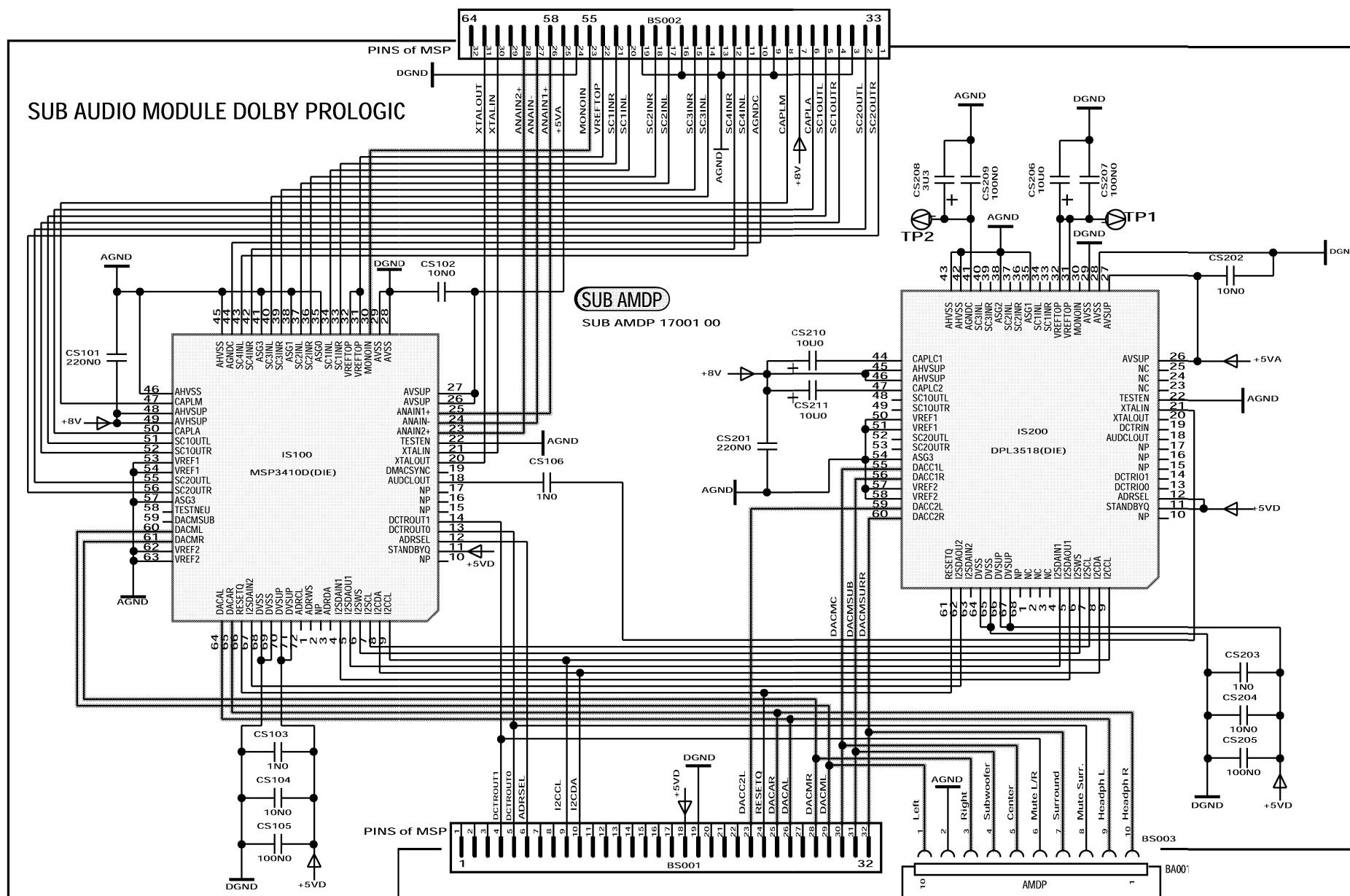
AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR (MONO)



AUDIO SIGNAL MODULE DOLBY PROLOGIC - MODULE AUDIO DOLBY PROLOGIC - DOLBY PROLOGIC VERSTÄRKER - MODULO AUDIO DOLBY PROLOGIC
ESQUEMA DEL MÓDULO AMPLIFICADOR DE AUDIO

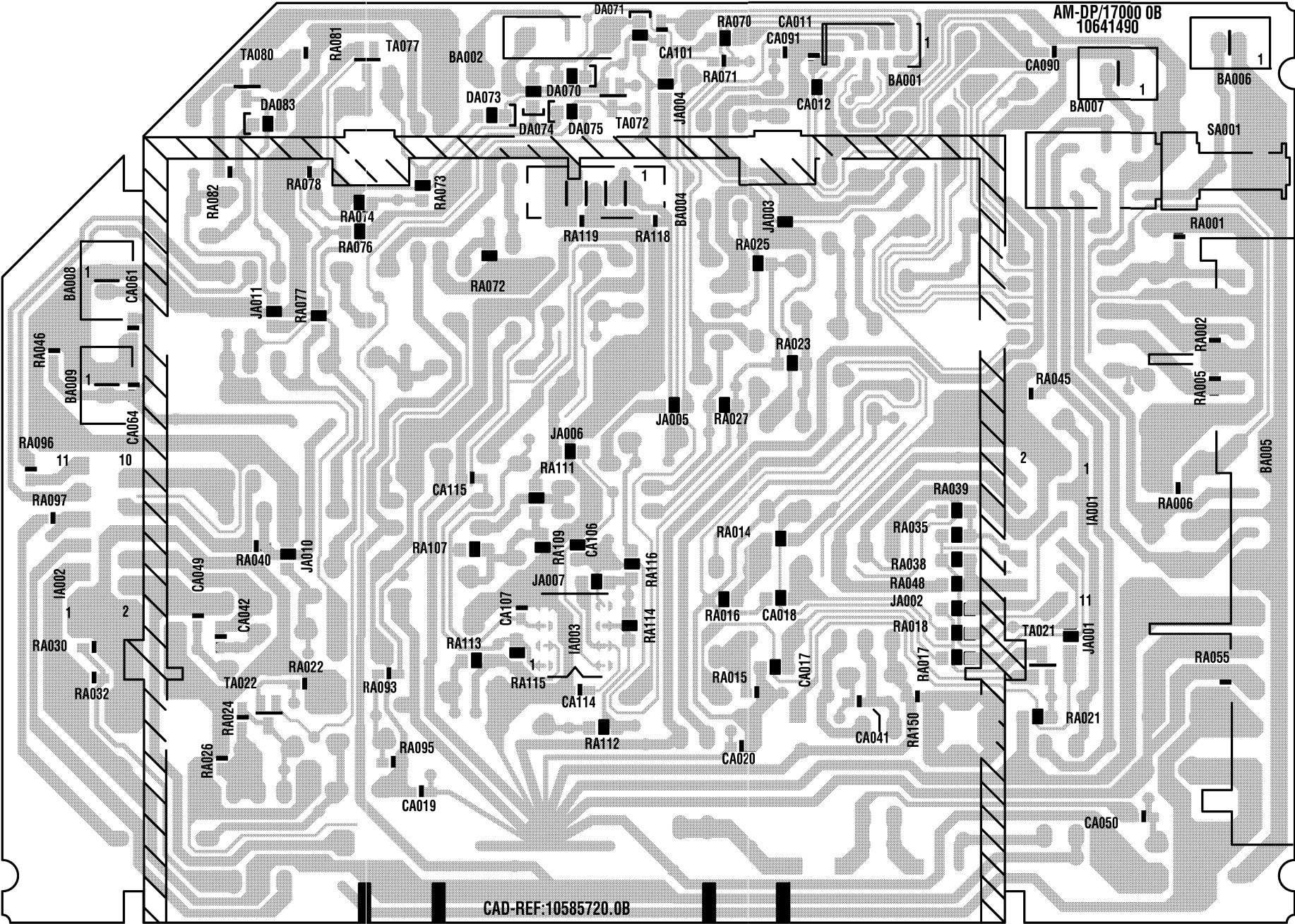


SUB AUDIO SIGNAL MODULE - SUB MODULE AUDIO - AUDIO SIGNAL SUBMODUL - SUB MODULO AUDIO



AUDIO SIGNAL MODULE DOLBY PROLOGIC - MODULE AUDIO DOLBY PROLOGIC - DOLBY PROLOGIC VERSTÄRKER - MODULO AUDIO DOLBY PROLOGIC - ESQUEMA DEL MÓDULO AMPLIFICADOR DE AUDIO

SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN

(5) : standby

Note :
During measurements in the power supply unit
- Use the primary power unit ground (PGND).

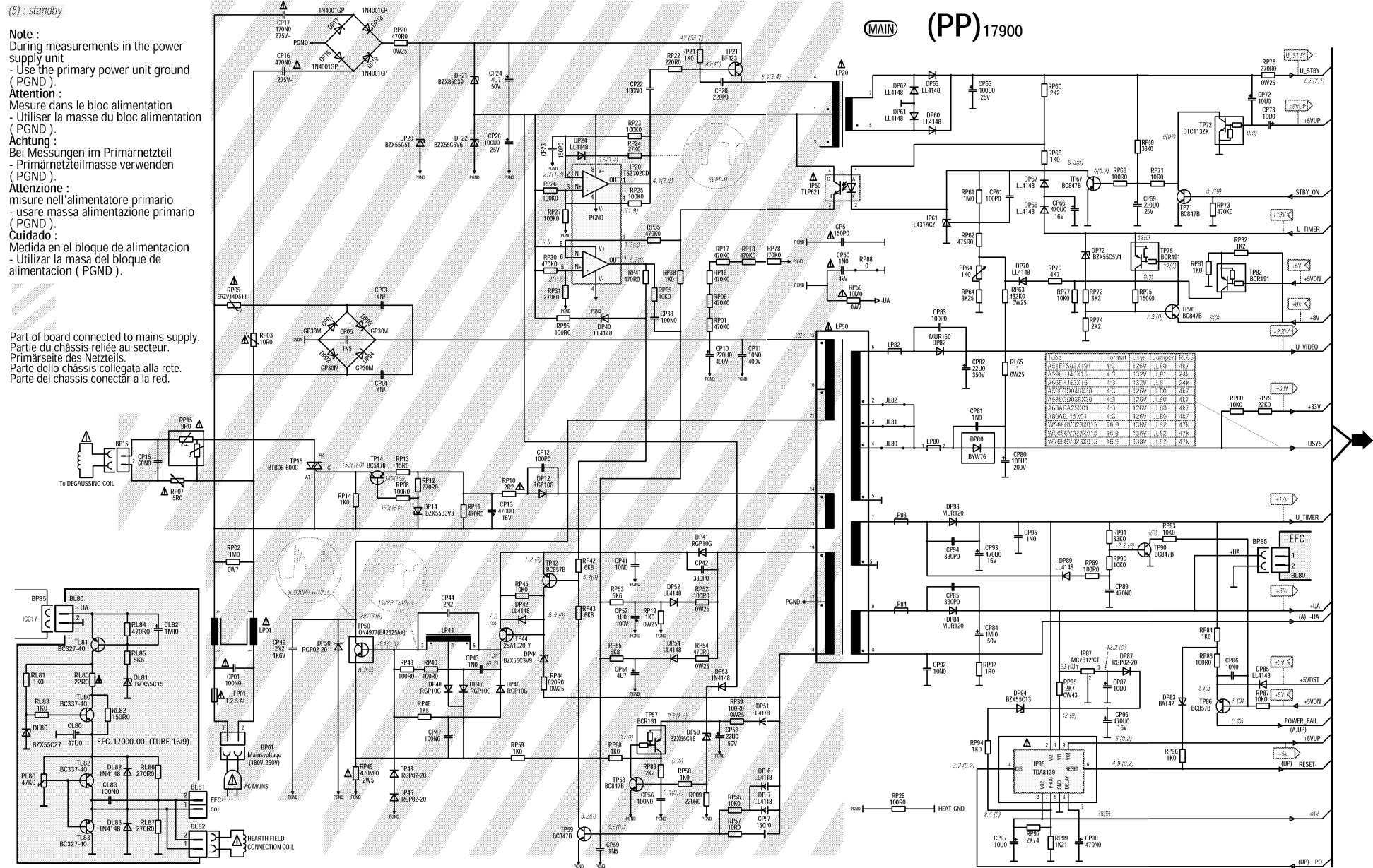
Attention :
Mesure dans le bloc alimentation
- Utiliser la masse du bloc alimentation (PGND).

Achtung :
Bei Messungen im Primärnetzteil
- Primärnetzteilmasse verwenden (PGND).

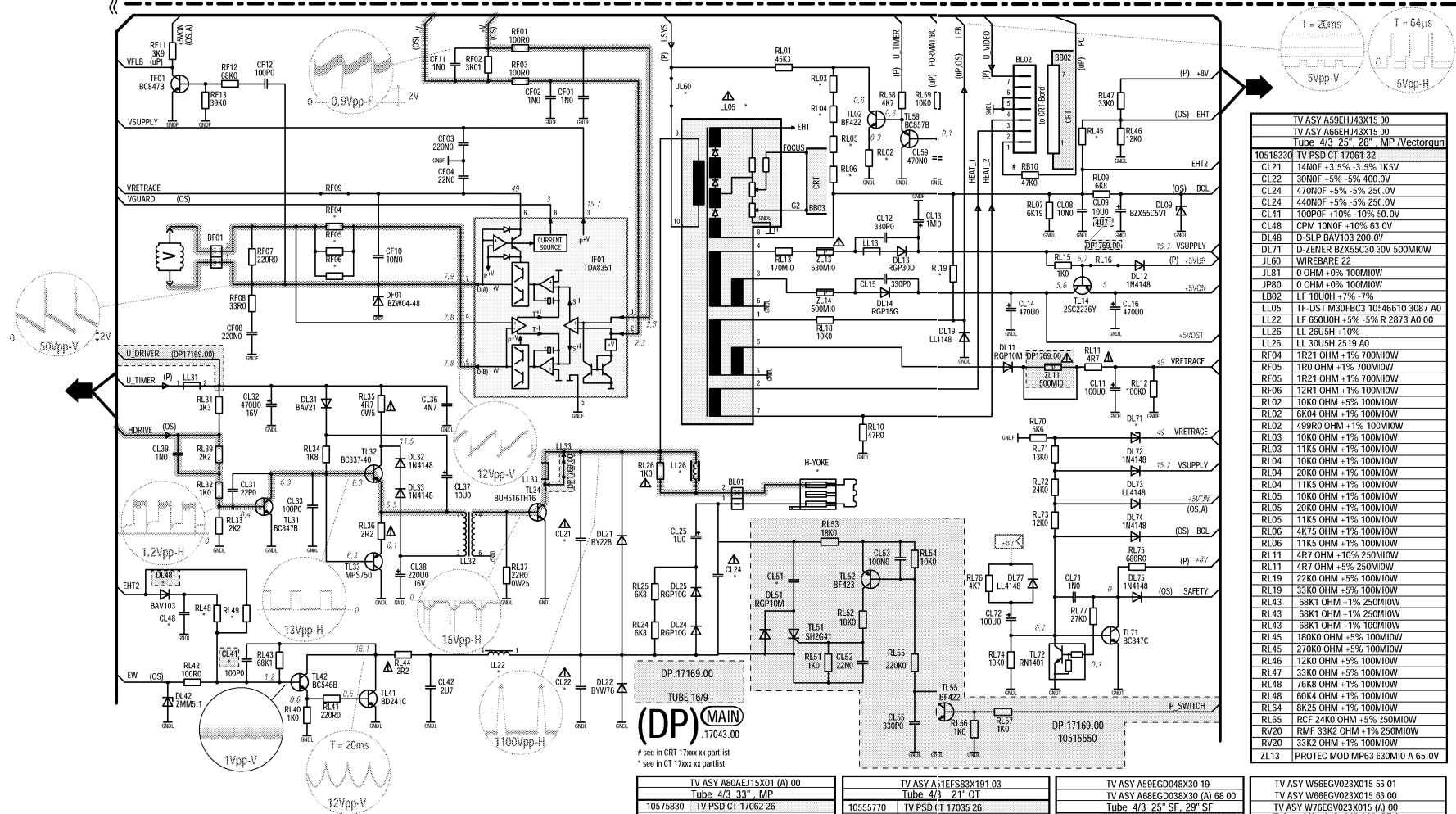
Attenzione :
misura nell'alimentatore primario
- usare massa alimentazione primario (PGND).

Cuidado :
Medida en el bloque de alimentación
- Utilizar la masa del bloque de alimentación (PGND).

Part of board connected to mains supply.
Partie du chassis reliée au secteur.
Primärseite des Netzteils.
Parte dello chassis collegata alla rete.
Parte del chassis conectar a la red.



⚠ Use isolating mains transformer - Utiliser un transformateur isolateur du secteur - Einen Trenntrafo verwenden
Utilizar un transformador aislador de red - Utilizzare un trasformatore per isolarvi dalla rete



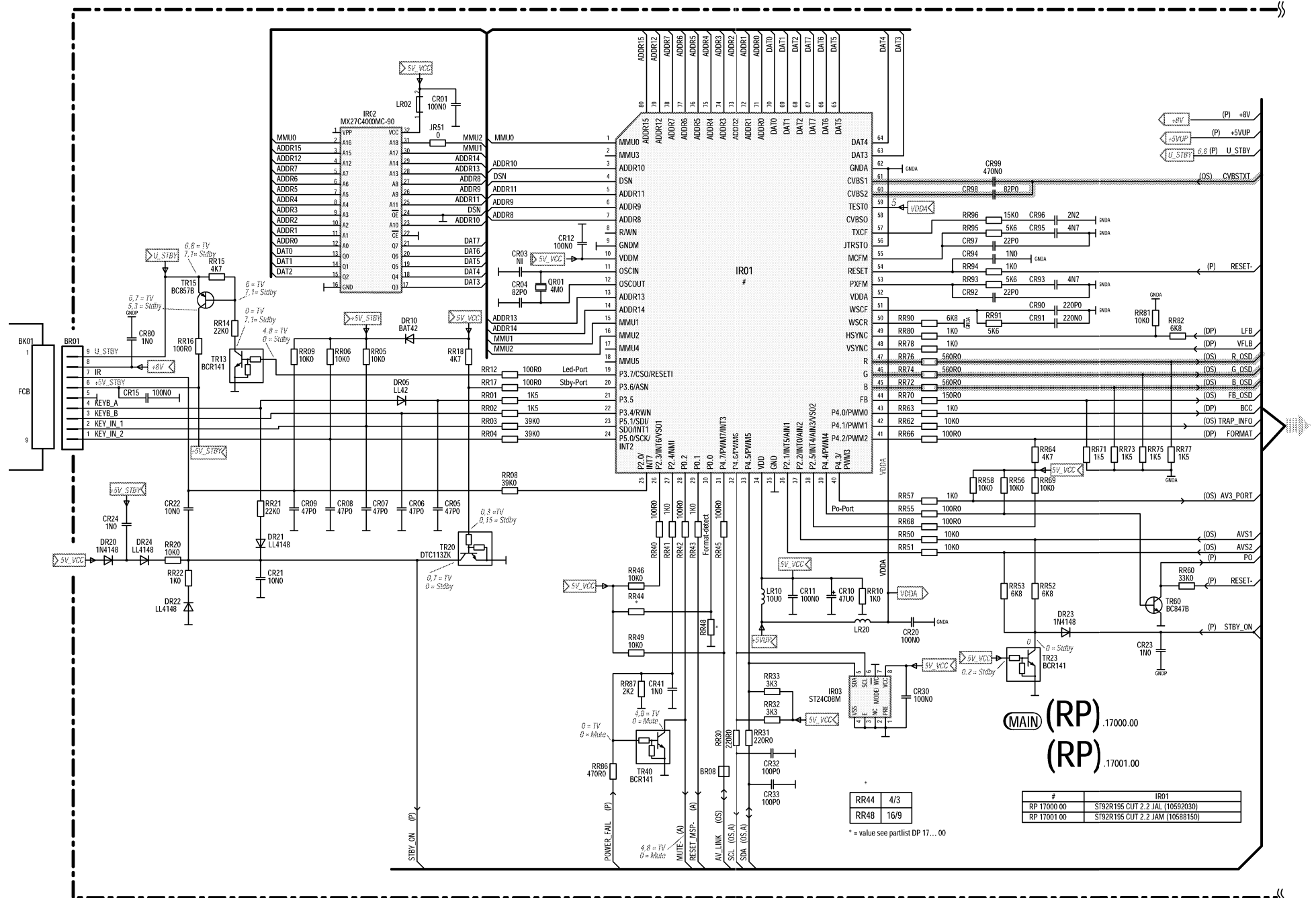
⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

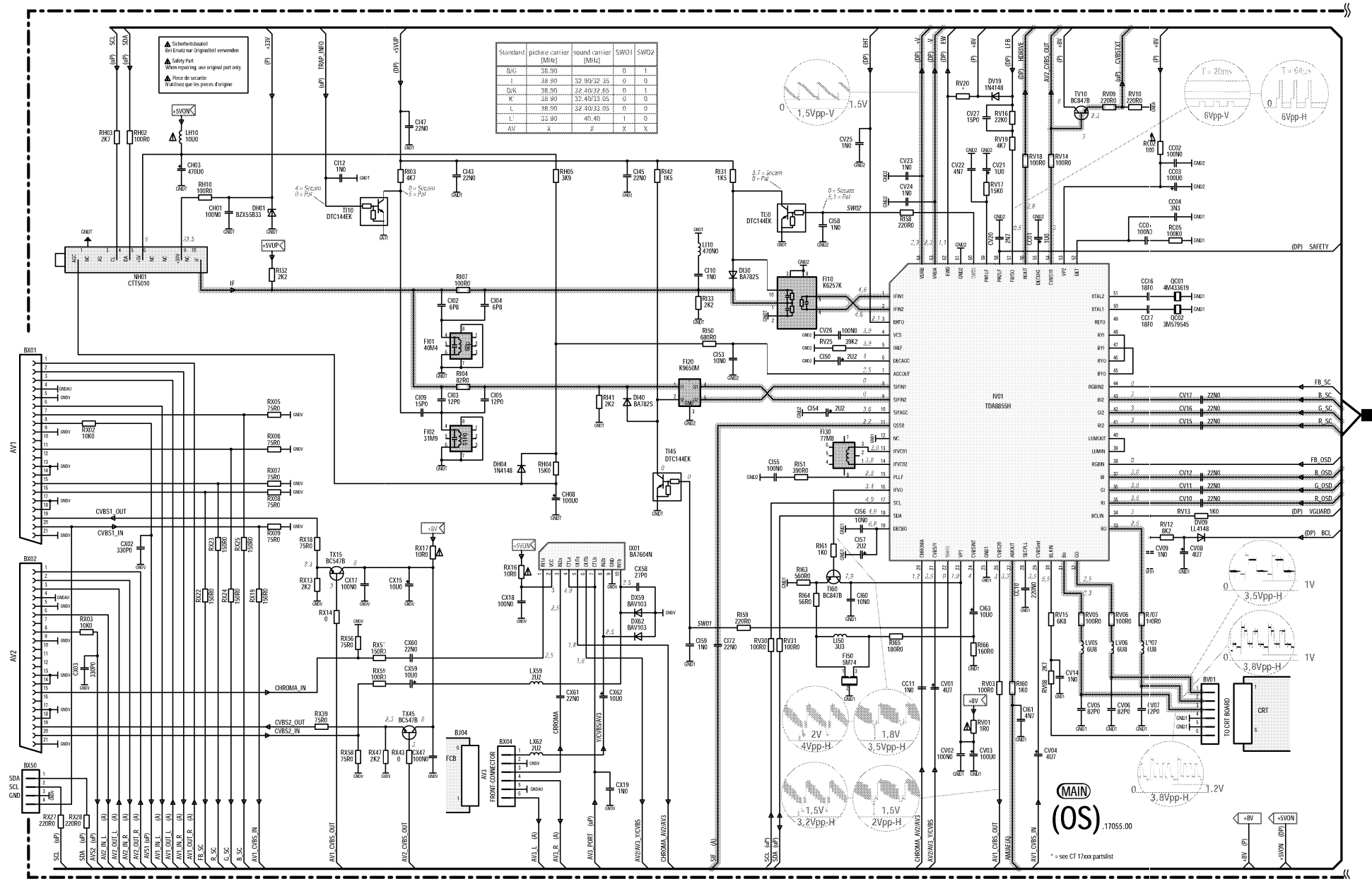
Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraîne la non-conformité de l'appareil.
Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) durch nicht normgerechte Teile ersetzt werden, erlischt die Haftung des Herstellers.

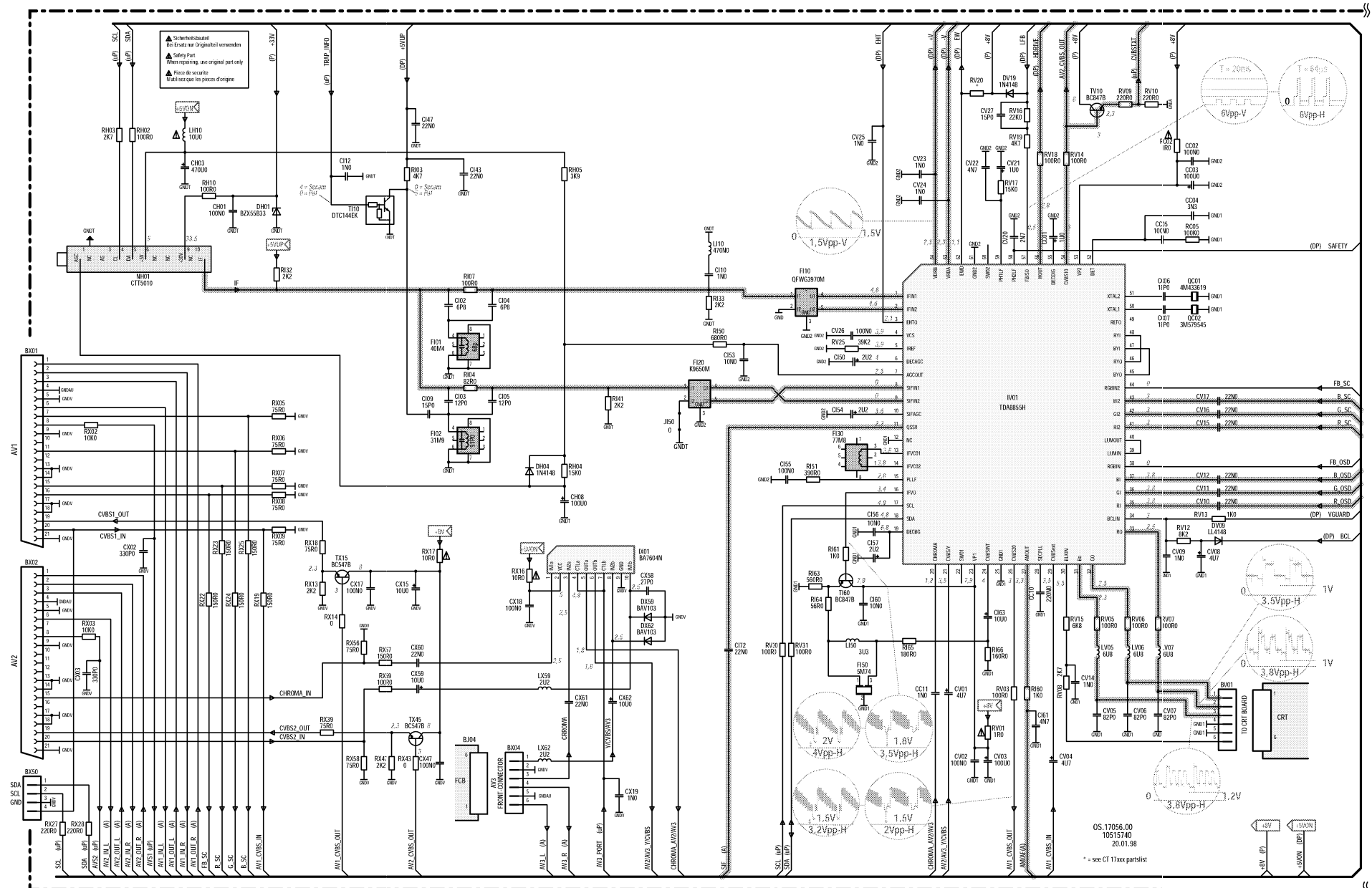
La sostituzione degli elementi di sicurezza (contrassegnati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformità dell'apparecchio.
In tal caso è "esclusa la responsabilità" del costruttore.

La substitución de elementos de seguridad (marcados con el símbolo ⚠) por componentes no homologados según la norma CEI 65, provoca la no conformidad del aparato.
En ese caso, el fabricante cesa de ser responsable.





RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR/TRATAMENTO VIDEO



MAIN (AP)
1'000.00
(FM-Stereo)

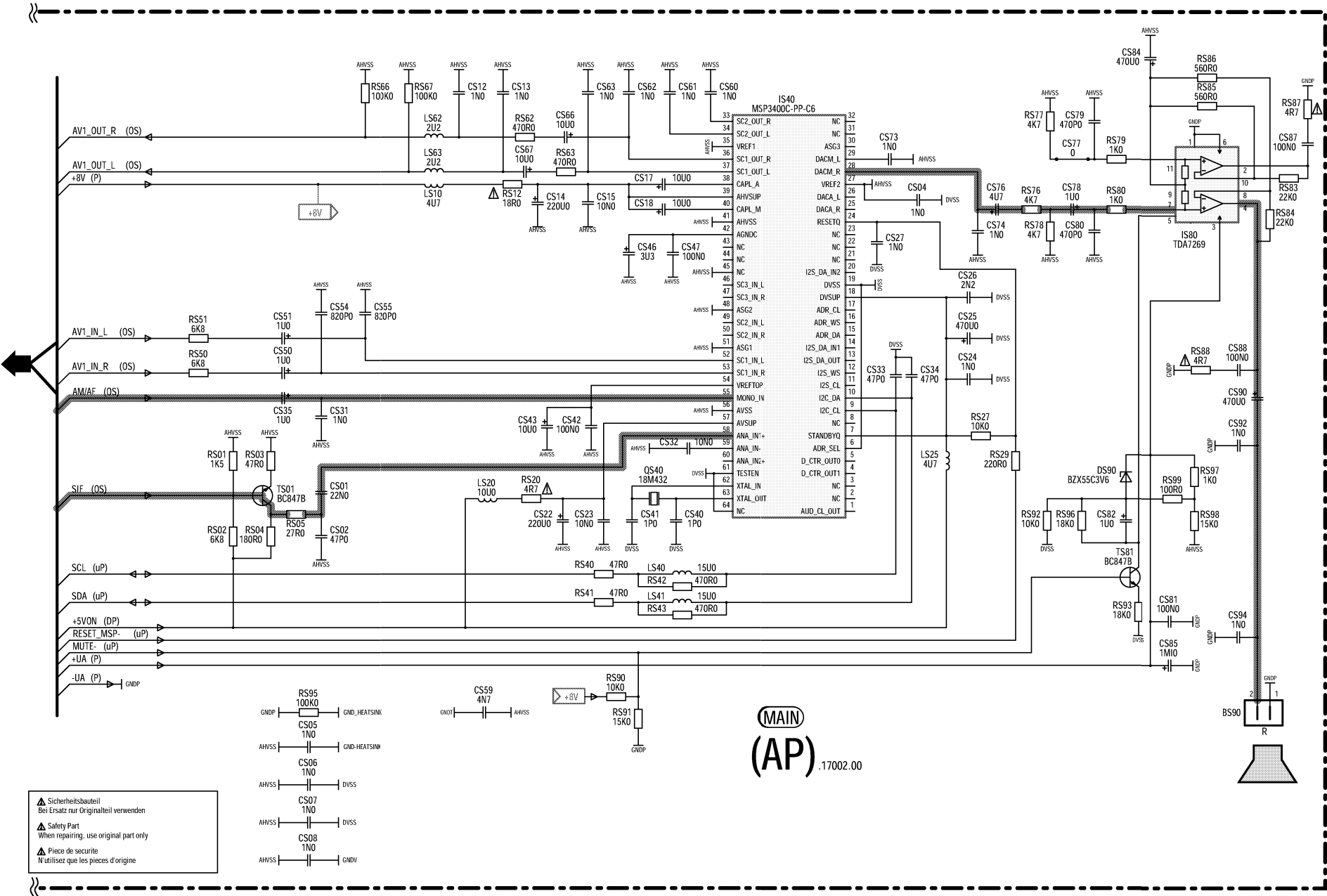
Sicherheitsteil
Bei Ersatz nur Originalteile verwenden
Safety Part
When repairing, use original part only
Piece de securite
N'utilisez que les pieces d'origine

VIRTUAL DOLBY
IS40 = SUB AMVD 19100 00 => VIRTUAL DOLBY
= SUB AMVD 17001 00 => DOLBY PROLOGIC
= MSP 34100-PP => STEREO / NICAM
= MSP 3400C-PP-C5 => STEREO 2X10W

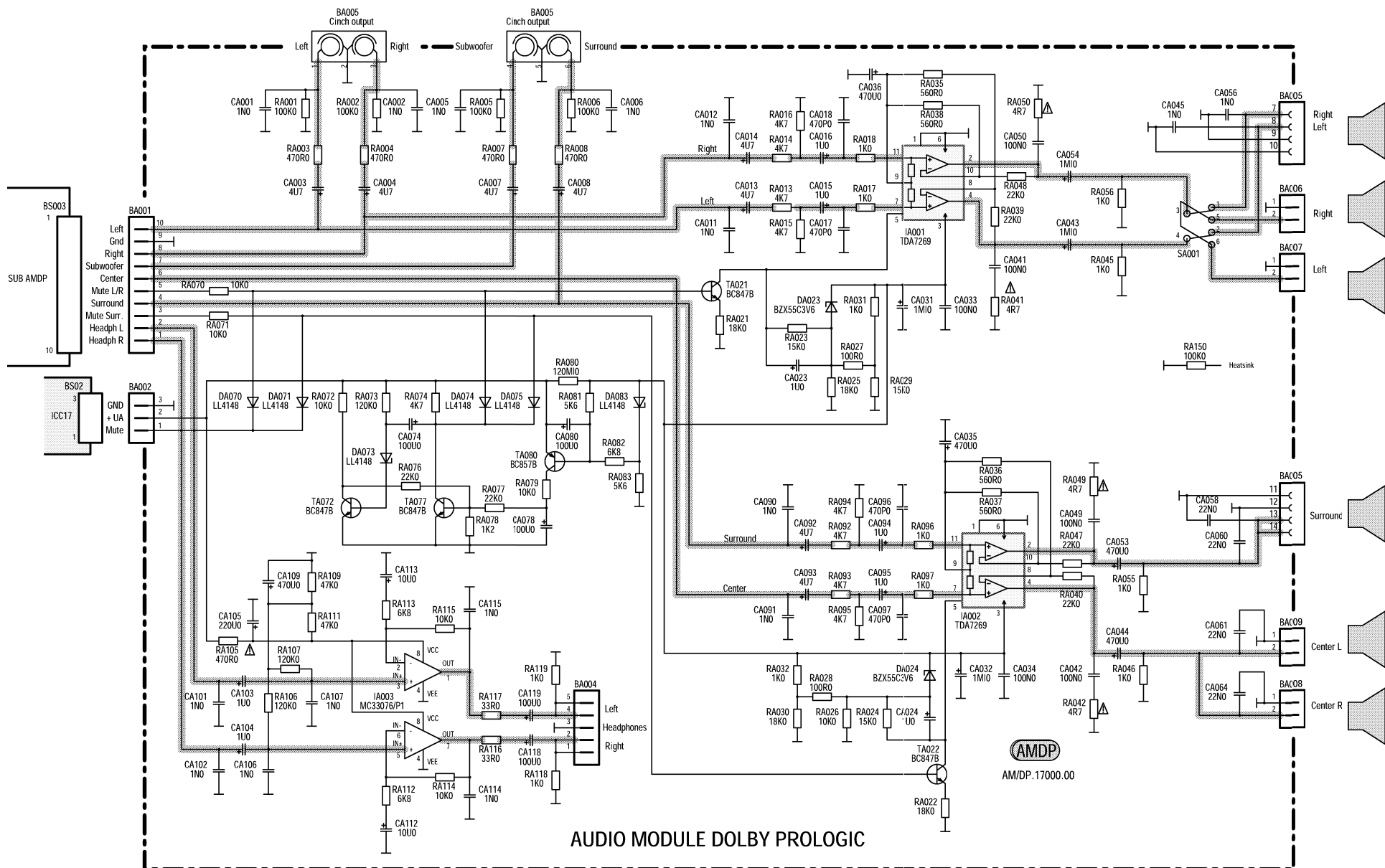
Components and Connections:

- Inputs:** AV2_OUT_R (OS), AV2_OUT_L (OS), AV1_OUT_R (OS), AV1_OUT_L (OS), +8V (P), AV3_L (OS), AV3_R (OS), AV2_IN_L (OS), AV2_IN_R (OS), AV1_IN_L (OS), AV1_IN_R (OS), AM/AF (OS), SIF (OS), SCL (uP), SDA (uP), +5VON (DP), RESET_MSP- (uP), MUTE- (uP), +UA (P) 33, -UA (P) GNDP.
- Outputs:** AV2_OUT_R (OS), AV2_OUT_L (OS), AV1_OUT_R (OS), AV1_OUT_L (OS), +8V (P), AV3_L (OS), AV3_R (OS), AV2_IN_L (OS), AV2_IN_R (OS), AV1_IN_L (OS), AV1_IN_R (OS), AM/AF (OS), SIF (OS), SCL (uP), SDA (uP), +5VON (DP), RESET_MSP- (uP), MUTE- (uP), +UA (P) 33, -UA (P) GNDP.
- ICs:** MSP3400C-PP-C6, TS01 BC847B, TS81 BC847B, DS90 BZX55C3V6, BS02, BA002, BS90, BS91, BS80, BS99, BS98, BS97, BS96, BS95, BS94, BS93, BS92, BS91, BS90.
- Resistors:** RS01, RS02, RS03, RS04, RS05, RS06, RS07, RS08, RS09, RS10, RS11, RS12, RS13, RS14, RS15, RS16, RS17, RS18, RS19, RS20, RS21, RS22, RS23, RS24, RS25, RS26, RS27, RS28, RS29, RS30, RS31, RS32, RS33, RS34, RS35, RS36, RS37, RS38, RS39, RS40, RS41, RS42, RS43, RS44, RS45, RS46, RS47, RS48, RS49, RS50, RS51, RS52, RS53, RS54, RS55, RS56, RS57, RS58, RS59, RS60, RS61, RS62, RS63, RS64, RS65, RS66, RS67, RS68, RS69, RS70, RS71, RS72, RS73, RS74, RS75, RS76, RS77, RS78, RS79, RS80, RS81, RS82, RS83, RS84, RS85, RS86, RS87, RS88, RS89, RS90, RS91, RS92, RS93, RS94, RS95, RS96, RS97, RS98, RS99, RS00.
- Capacitors:** CS01, CS02, CS03, CS04, CS05, CS06, CS07, CS08, CS09, CS10, CS11, CS12, CS13, CS14, CS15, CS16, CS17, CS18, CS19, CS20, CS21, CS22, CS23, CS24, CS25, CS26, CS27, CS28, CS29, CS30, CS31, CS32, CS33, CS34, CS35, CS36, CS37, CS38, CS39, CS40, CS41, CS42, CS43, CS44, CS45, CS46, CS47, CS48, CS49, CS50, CS51, CS52, CS53, CS54, CS55, CS56, CS57, CS58, CS59, CS60, CS61, CS62, CS63, CS64, CS65, CS66, CS67, CS68, CS69, CS70, CS71, CS72, CS73, CS74, CS75, CS76, CS77, CS78, CS79, CS80, CS81, CS82, CS83, CS84, CS85, CS86, CS87, CS88, CS89, CS90, CS91, CS92, CS93, CS94, CS95, CS96, CS97, CS98, CS99, CS00.
- Inductors:** LS01, LS02, LS03, LS04, LS05, LS06, LS07, LS08, LS09, LS10, LS11, LS12, LS13, LS14, LS15, LS16, LS17, LS18, LS19, LS20, LS21, LS22, LS23, LS24, LS25, LS26, LS27, LS28, LS29, LS30, LS31, LS32, LS33, LS34, LS35, LS36, LS37, LS38, LS39, LS40, LS41, LS42, LS43, LS44, LS45, LS46, LS47, LS48, LS49, LS50, LS51, LS52, LS53, LS54, LS55, LS56, LS57, LS58, LS59, LS60, LS61, LS62, LS63, LS64, LS65, LS66, LS67, LS68, LS69, LS70, LS71, LS72, LS73, LS74, LS75, LS76, LS77, LS78, LS79, LS80, LS81, LS82, LS83, LS84, LS85, LS86, LS87, LS88, LS89, LS90, LS91, LS92, LS93, LS94, LS95, LS96, LS97, LS98, LS99, LS00.

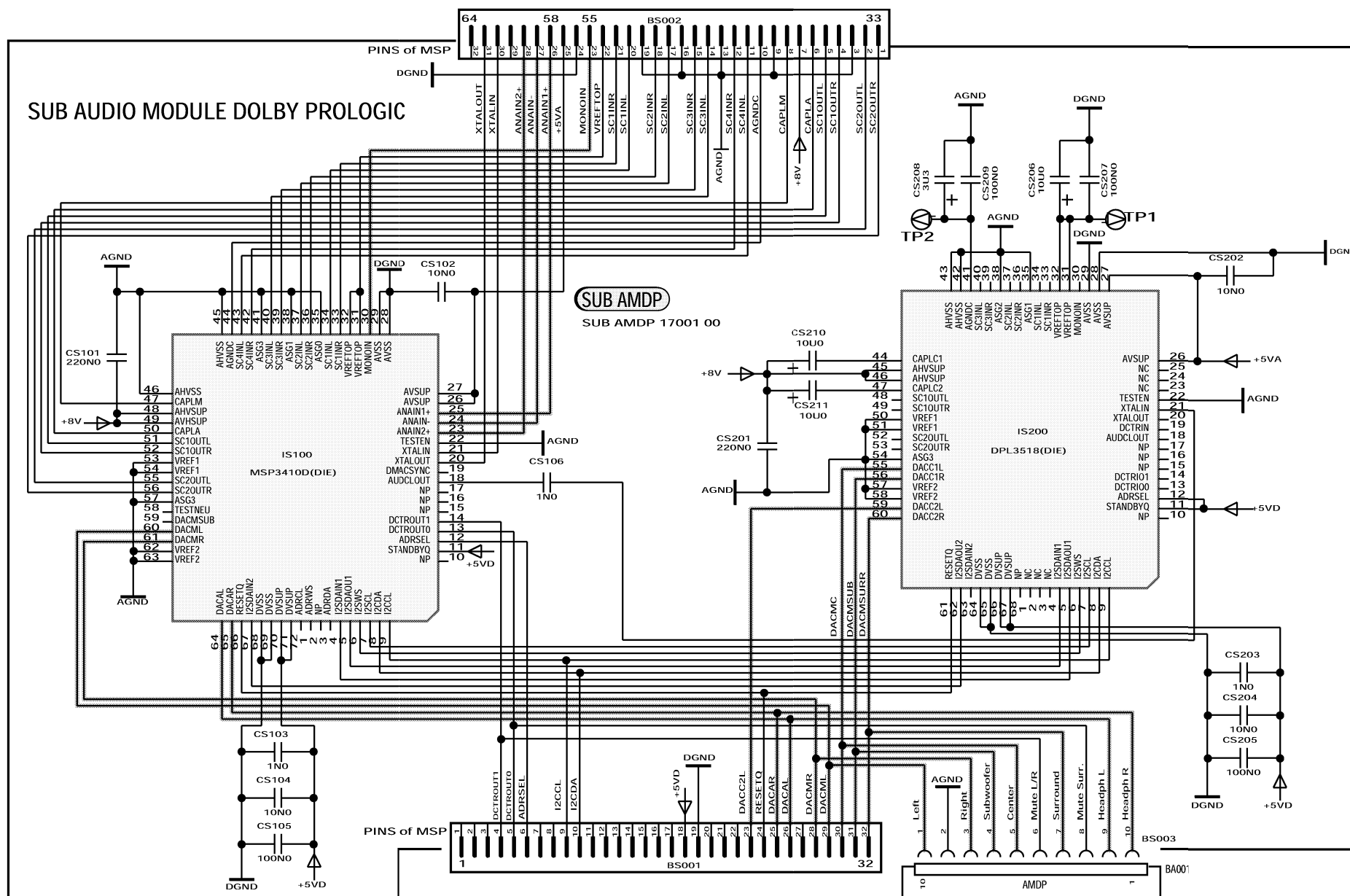
AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR (MONO)

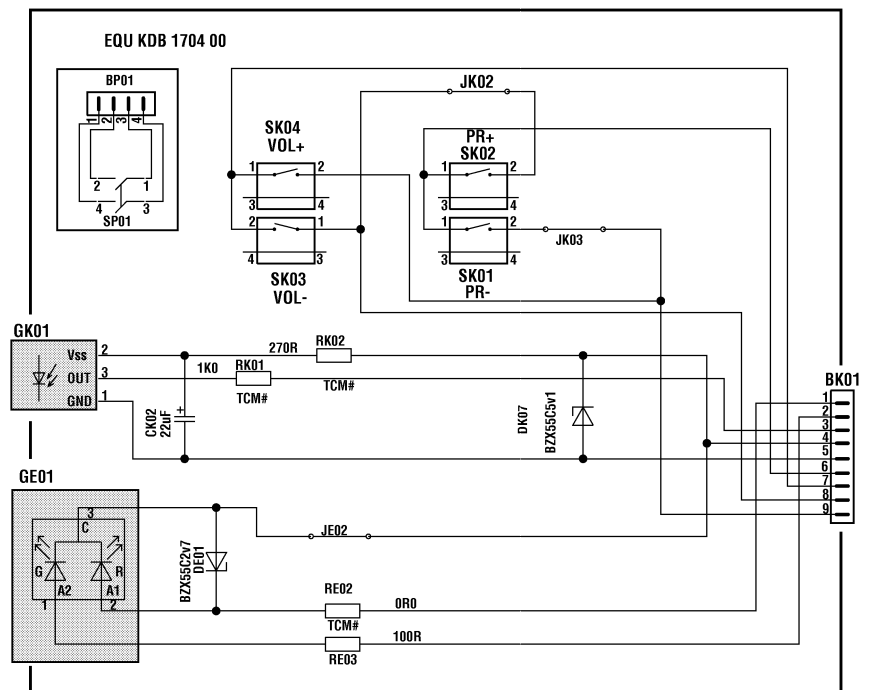
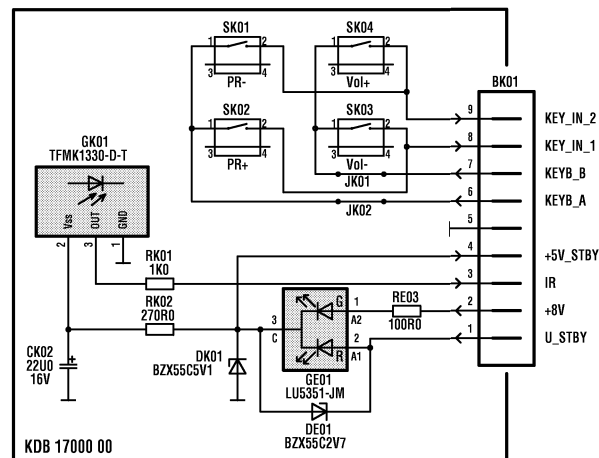
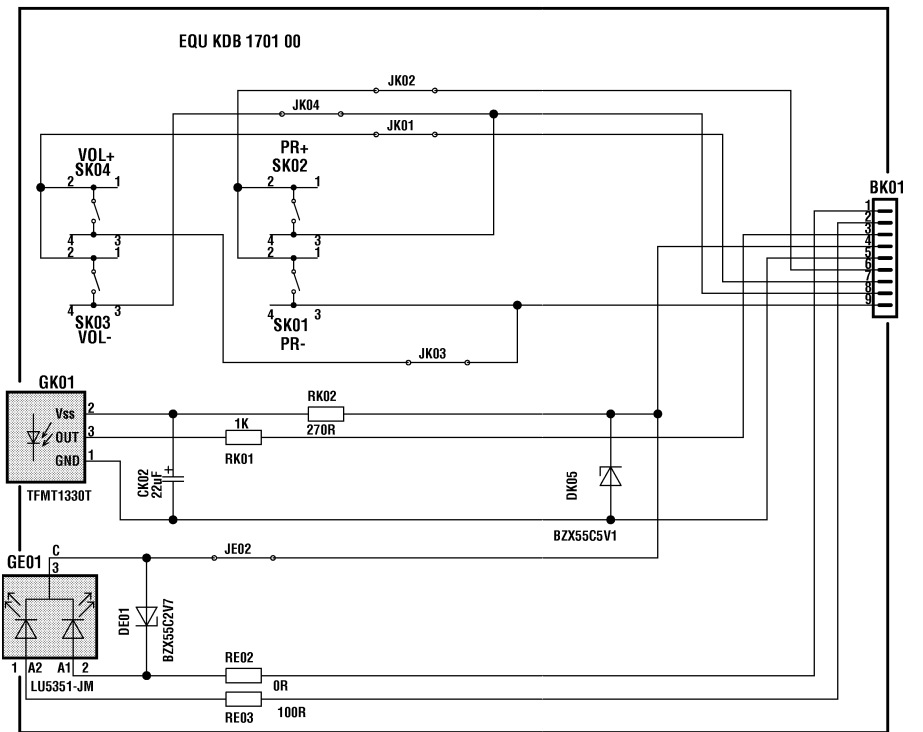
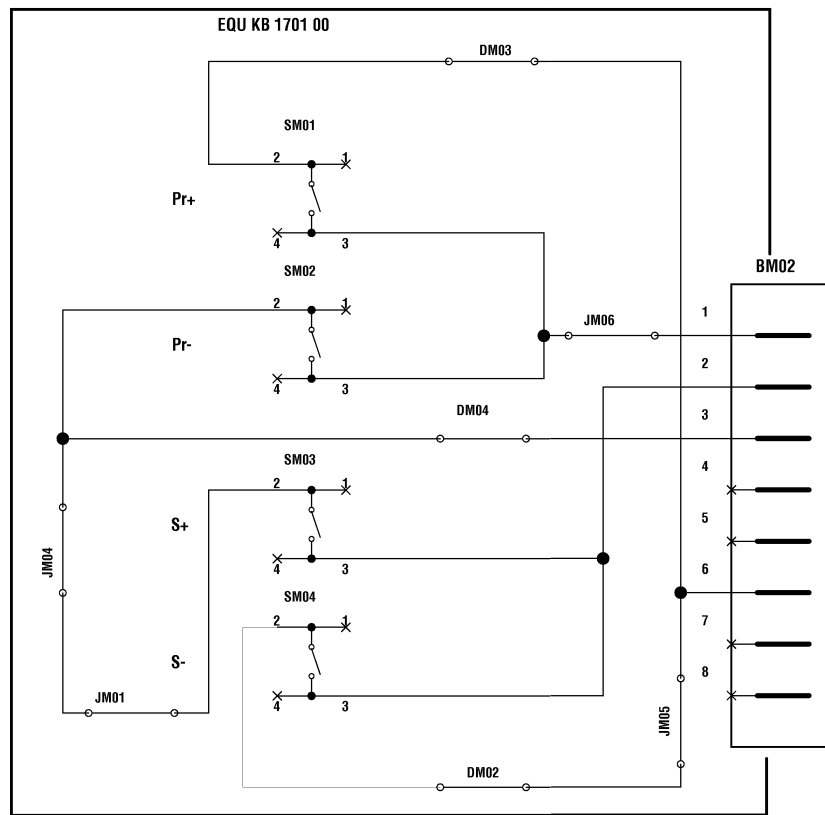


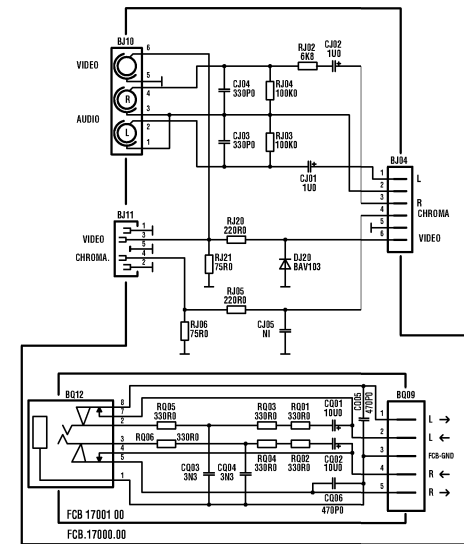
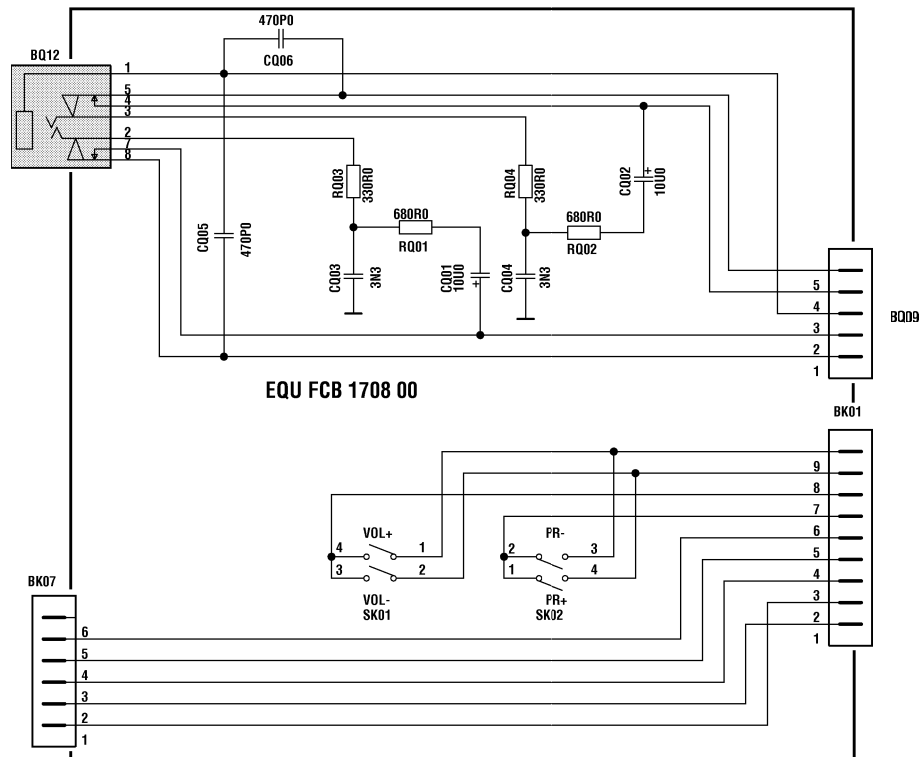
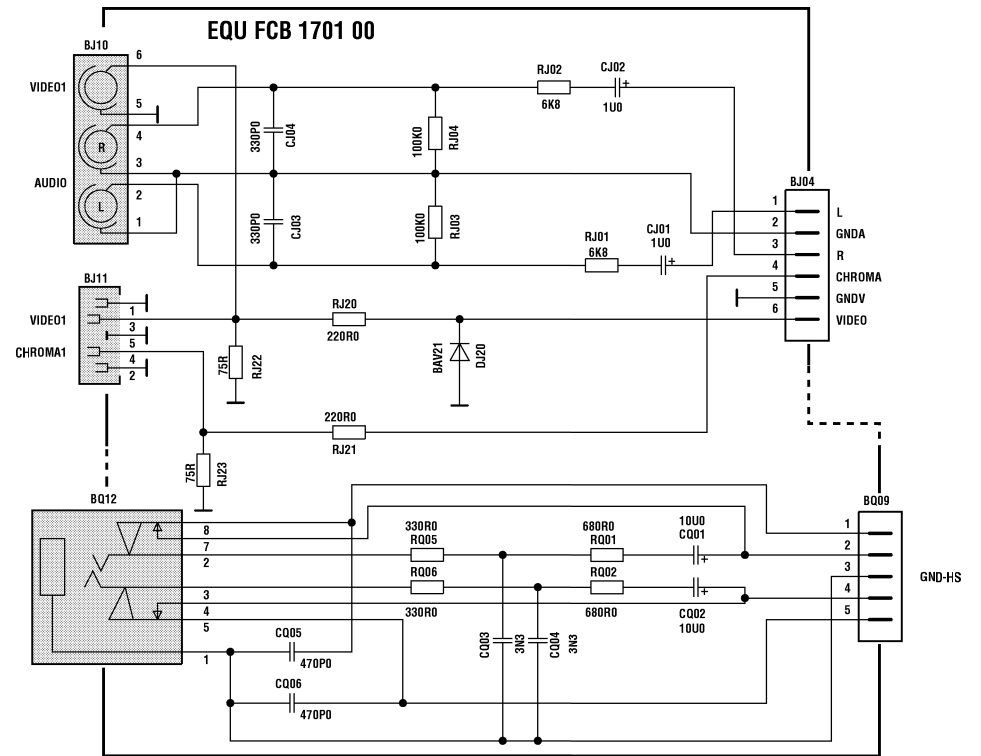
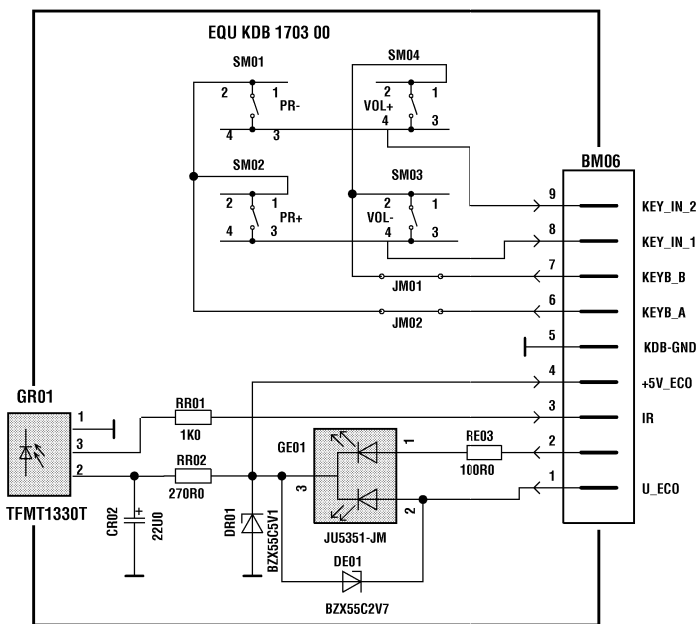
AUDIO SIGNAL MODULE DOLBY PROLOGIC - MODULE AUDIO DOLBY PROLOGIC - DOLBY PROLOGIC VERSTÄRKER - MÓDULO AUDIO DOLBY PROLOGIC
ESQUEMA DEL MÓDULO AMPLIFICADOR DE AUDIO

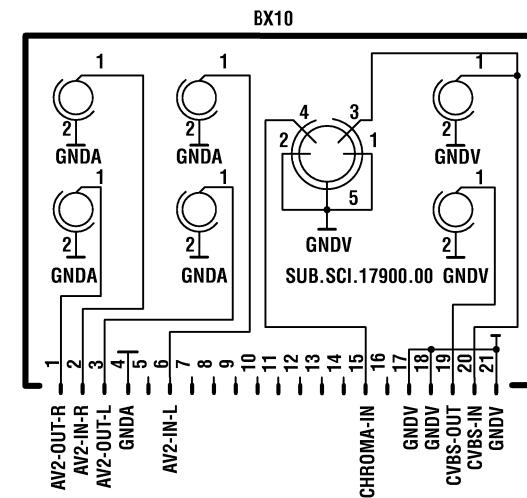
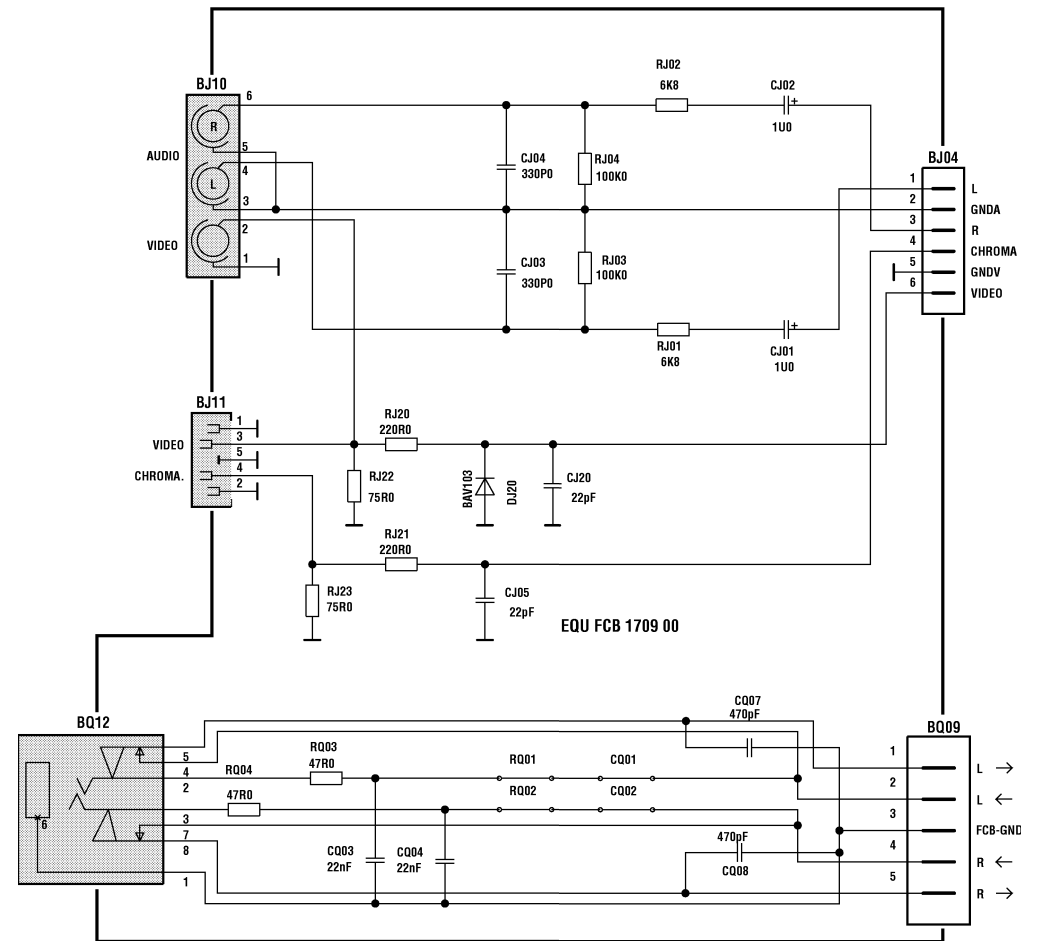
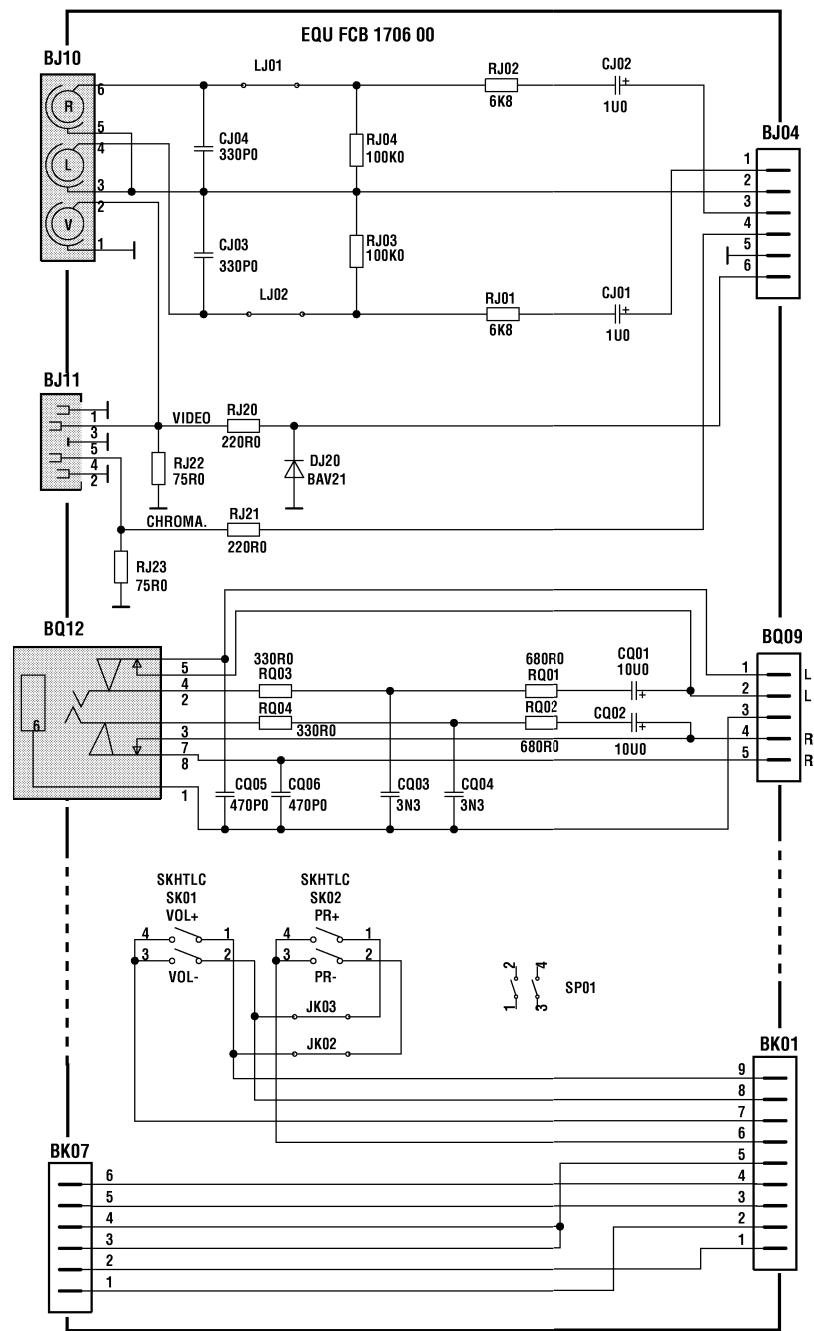


SUB AUDIO SIGNAL MODULE - SUB MODULE AUDIO - AUDIO SIGNAL SUBMODUL - SUB MODULO AUDIO









POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN

(5) : standby

Note :
During measurements in the power supply unit
- Use the primary power unit ground (PGND).

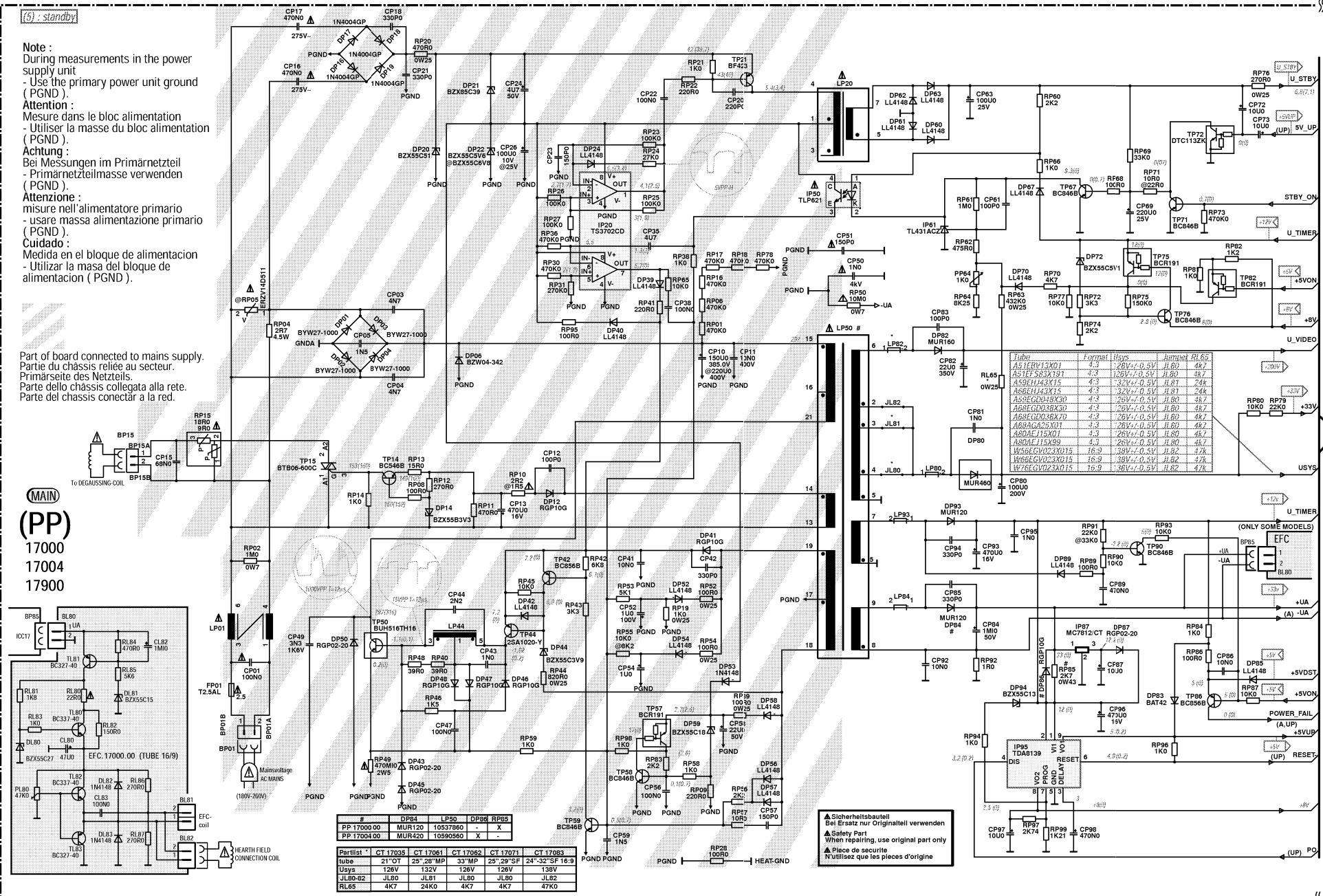
Attention :
Mesure dans le bloc alimentation
- Utiliser la masse du bloc alimentation
(PGND).

Achtung:
Bei Messungen im Primärnetzteil
- Primärnetzteilmasse verwenden
(PGND).

Attenzione :
 misure nell'alimentatore primario
 - usare massa alimentazione primario
 (PGND).

Cuidado:
Medida en el bloque de alimentacion
- Utilizar la masa del bloque de alimentacion (PGND).

Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello chassis collegata alla rete.
Parte del chassís conector a la red.





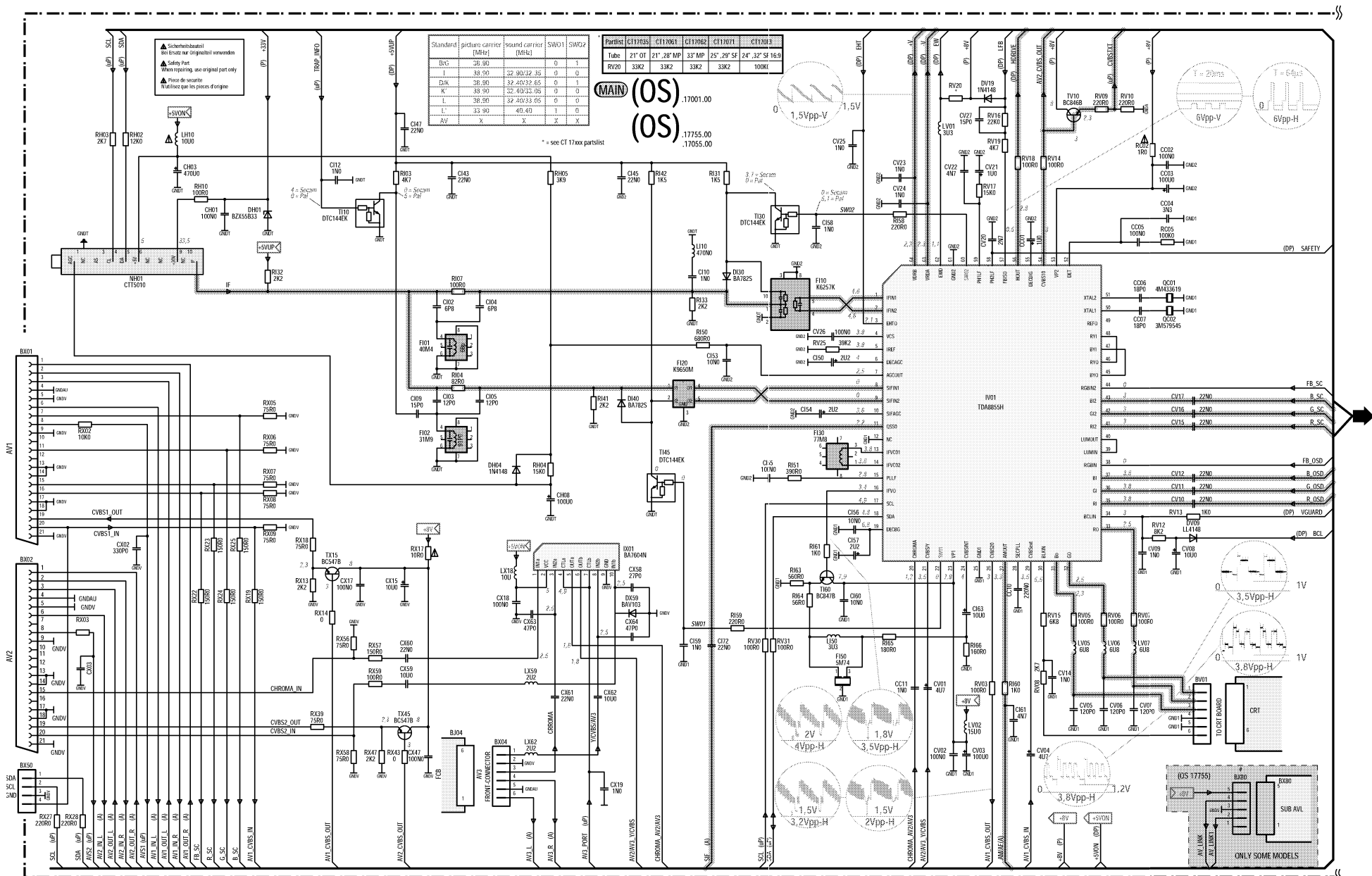
».

TV ASY A66EHJ43X85 01
TV DDP 05 10001 00

TV ASY A68EGD038X70 (A) 68 00	RV20	100K0 OHM +1% 250MI0W
ZL08D 03 18031 06	ZL13	MP63 630MI0 A 65.0V

[illegible]

RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO
SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR / TRATAMENTO VIDEO



AV2_OUT_R (OS)
 AV2_OUT_L (OS)
 AV1_OUT_R (OS)
 AV1_OUT_L (OS)
 +8V (P)
 AV3_L (OS)
 AV3_R (OS)
 AV2_IN_L (OS)
 AV2_IN_R (OS)
 AV1_IN_L (OS)
 AV1_IN_R (OS)
 AM/AF (OS)
 SIF (OS)
 SCL (uP)
 SDA (uP)
 +5VON (DP)
 RESET_MSP- (uP)
 MUTE- (uP)
 +UA (P) 33
 -UA (P) GNDP

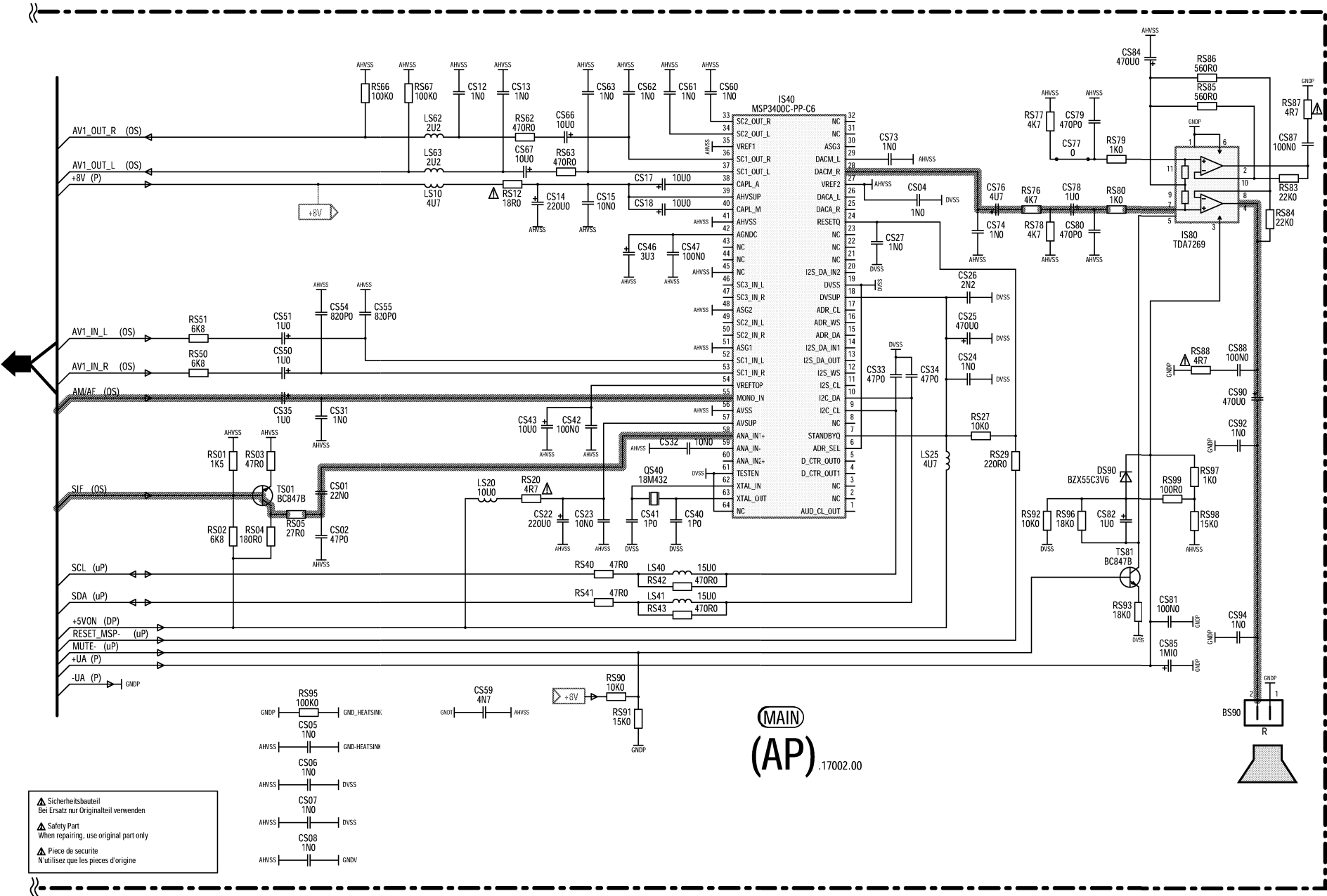
RS64 100K0
 RS65 100K0
 RS66 100K0
 RS67 100K0
 LS60 2U2
 LS61 2U2
 LS62 2U2
 LS63 2U2
 CS30 1N0
 CS31 1N0
 CS32 1N0
 CS33 1N0
 CS34 1N0
 CS35 1N0
 CS36 470P0
 CS37 470P0
 CS38 470P0
 CS39 470P0
 CS40 470P0
 CS41 470P0
 CS42 470P0
 CS43 470P0
 CS44 470P0
 CS45 470P0
 CS46 470P0
 CS47 470P0
 CS48 470P0
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 CS92 470P0
 CS93 470P0
 CS94 470P0
 CS95 470P0
 CS96 470P0
 CS97 470P0
 CS98 470P0
 CS99 470P0
 CS100 470P0

LS10 4U7
 LS11 4U7
 LS12 4U7
 LS13 4U7
 LS14 4U7
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 LS19 4U7
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 LS99 4U7
 LS100 4U7

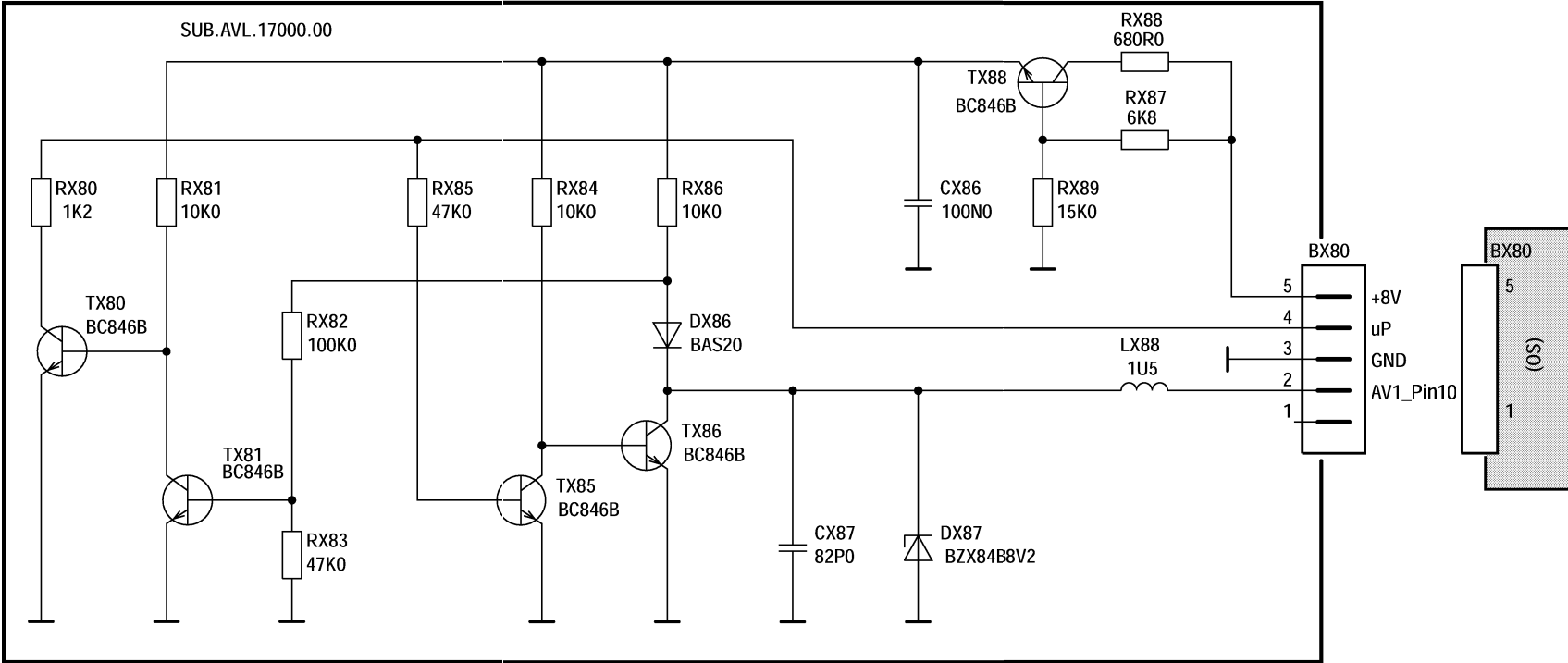
RS1 1K5
 RS2 6K8
 RS3 47R0
 RS4 180R0
 RS5 27R0
 RS6 47P0
 RS7 1K5
 RS8 6K8
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 RS10 180R0
 RS11 27R0
 RS12 47P0
 RS13 1K5
 RS14 6K8
 RS15 47R0
 RS16 180R0
 RS17 27R0
 RS18 47P0
 RS19 1K5
 RS20 6K8
 RS21 47R0
 RS22 180R0
 RS23 27R0
 RS24 47P0
 RS25 1K5
 RS26 6K8
 RS27 47R0
 RS28 180R0
 RS29 27R0
 RS30 47P0
 RS31 1K5
 RS32 6K8
 RS33 47R0
 RS34 180R0
 RS35 27R0
 RS36 47P0
 RS37 1K5
 RS38 6K8
 RS39 47R0
 RS40 180R0
 RS41 27R0
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 RS43 1K5
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 RS47 27R0
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 RS49 1K5
 RS50 6K8
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 RS52 180R0
 RS53 27R0
 RS54 47P0
 RS55 1K5
 RS56 6K8
 RS57 47R0
 RS58 180R0
 RS59 27R0
 RS60 47P0
 RS61 1K5
 RS62 6K8
 RS63 47R0
 RS64 180R0
 RS65 27R0
 RS66 47P0
 RS67 1K5
 RS68 6K8
 RS69 47R0
 RS70 180R0
 RS71 27R0
 RS72 47P0
 RS73 1K5
 RS74 6K8
 RS75 47R0
 RS76 180R0
 RS77 27R0
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 RS81 47R0
 RS82 180R0
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 RS88 180R0
 RS89 27R0
 RS90 47P0
 RS91 1K5
 RS92 6K8
 RS93 47R0
 RS94 180R0
 RS95 27R0
 RS96 47P0
 RS97 1K5
 RS98 6K8
 RS99 47R0
 RS100 180R0

CS01 22N0
 CS02 47P0
 CS03 1N0
 CS04 1N0
 CS05 1N0
 CS06 1N0
 CS07 1N0
 CS08 1N0
 CS09 1N0
 CS10 1N0
 CS11 1N0
 CS12 1N0
 CS13 1N0
 CS14 1N0
 CS15 1N0
 CS16 1N0
 CS17 1N0
 CS18 1N0
 CS19 1N0
 CS20 1N

AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERABEITUNG - SCHEMA DELL' AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR (MONO)



SUB AVL 17000



POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN

(5) : standby

Note :
During measurements in the power supply unit
- Use the primary power unit ground (PGND).

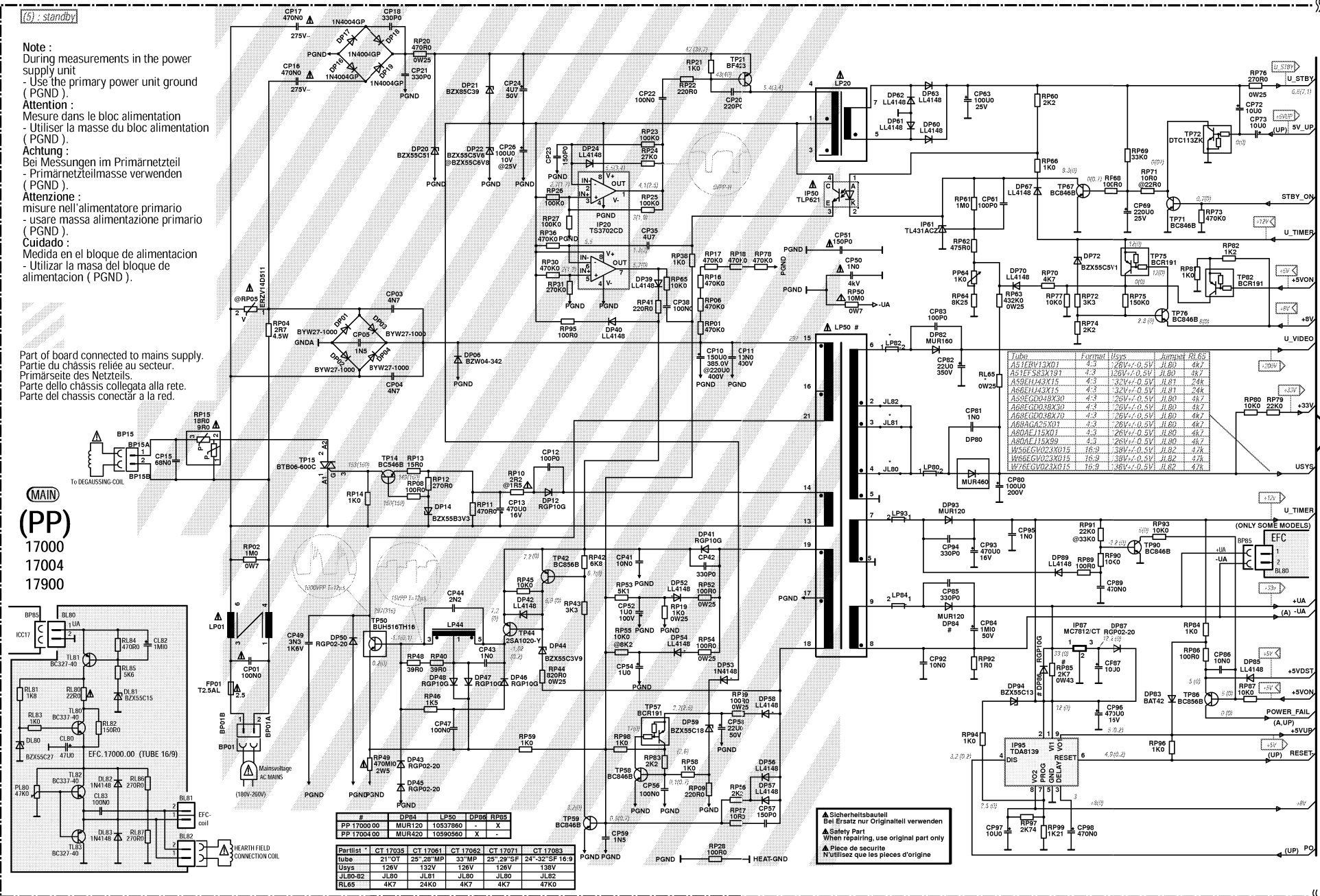
Attention :
Mesure dans le bloc alimentation
- Utiliser la masse du bloc alimentation
(PGND).

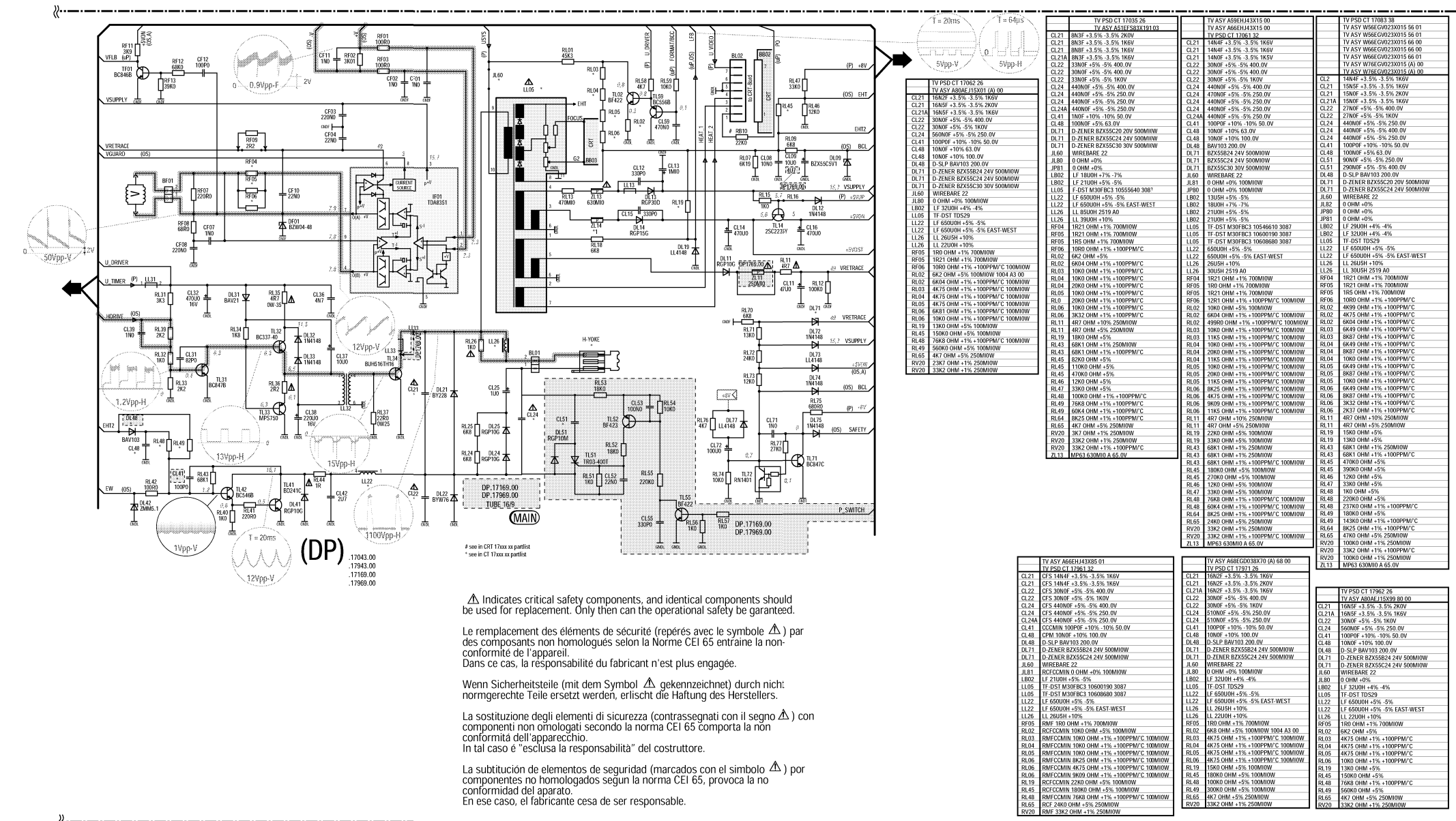
Achtung:
Bei Messungen im Primärnetzteil
- Primärnetzteilmasse verwenden
(PGND).

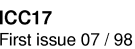
Attenzione :
 misure nell'alimentatore primario
 - usare massa alimentazione primario
 (PGND).

Cuidado:
Medida en el bloque de alimentacion
- Utilizar la masa del bloque de alimentacion (PGND).

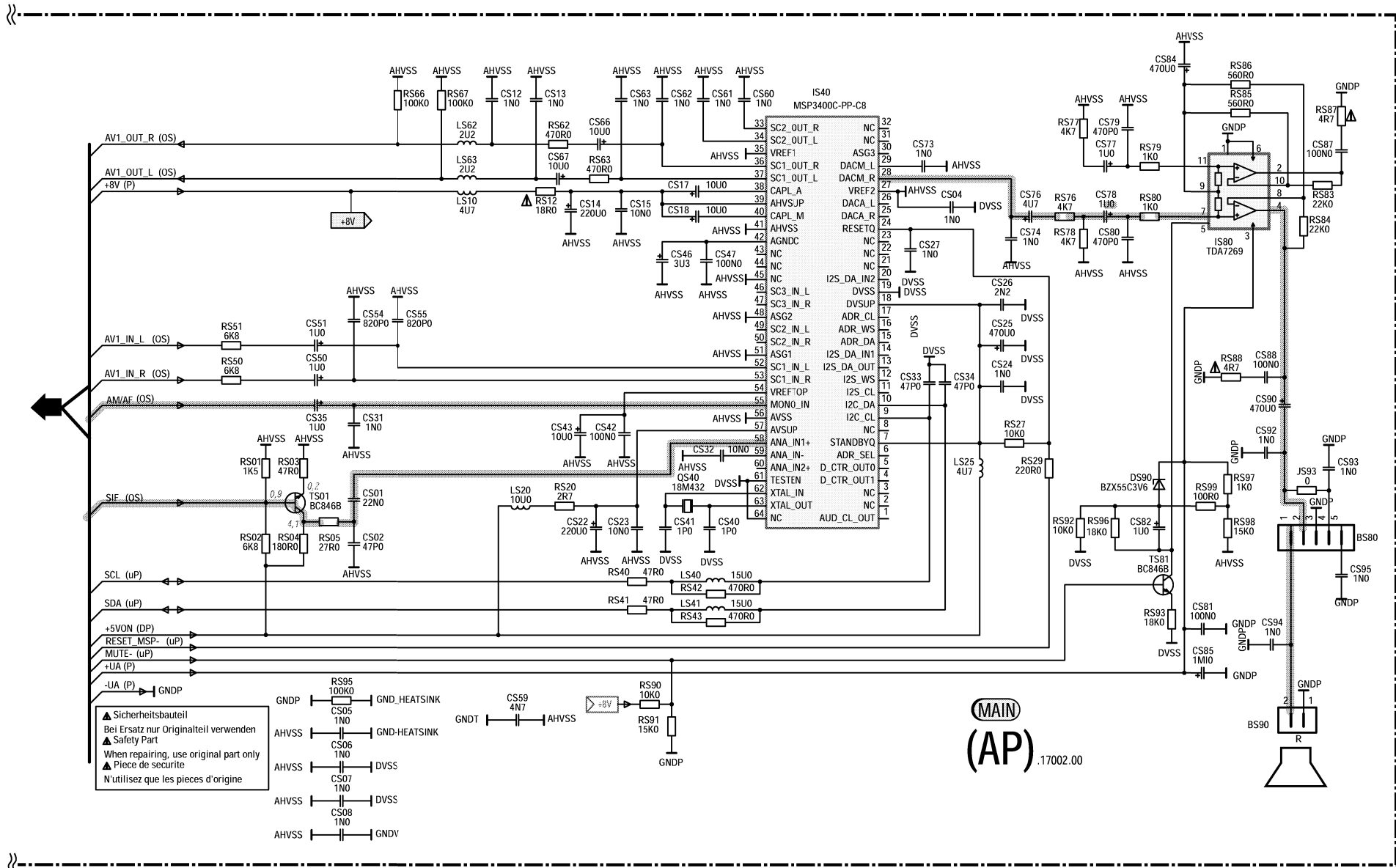
Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello chassis collegata alla rete.
Parte del chassís conector a la red.







AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR (MONO)



(S) : standby

Note :
During measurements in the power supply unit
- Use the primary power unit ground (PGND).

Attention :
Mesure dans le bloc alimentation
- Utiliser la masse du bloc alimentation (PGND).

Achtung :
Bei Messungen im Primärnetzteil
- Primärnetzteilmasse verwenden (PGND).

Attenzione :
misura nell'alimentatore primario
- usare massa alimentazione primario (PGND).

Cuidado :
Medida en el bloque de alimentación
- Utilizar la masa del bloque de alimentación (PGND).

Part of board connected to mains supply.
Partie du chassis reliée au secteur.
Primärseite des Netzteils.
Parte dello chassis collegata alla rete.
Parte del chassis conectar a la red.

MAIN
(PP)
17000
17004
17900

Part list

Partlist	CT 17095	CT 17061	CT 17062	CT 17071	CT 17083
Tube	12V	25"20"MP	33"MP	25"29"SF	24"32"SF 16.9
Usys	126V	132V	126V	126V	136V
LL80-82	LL80	LL81	LL80	LL80	LL82
RL65	4K7	24K0	4K7	4K7	47K0

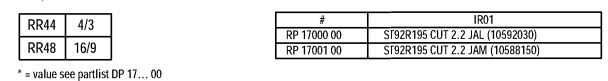
PP 17000 00 MUR120 10537860 - X
PP 17004 00 MUR420 10590560 X -

PP 17000 00 ≥ 10515500 ≥ 17.12.98
PP 17004 00 ≥ 10590630 ≥ 17.12.98

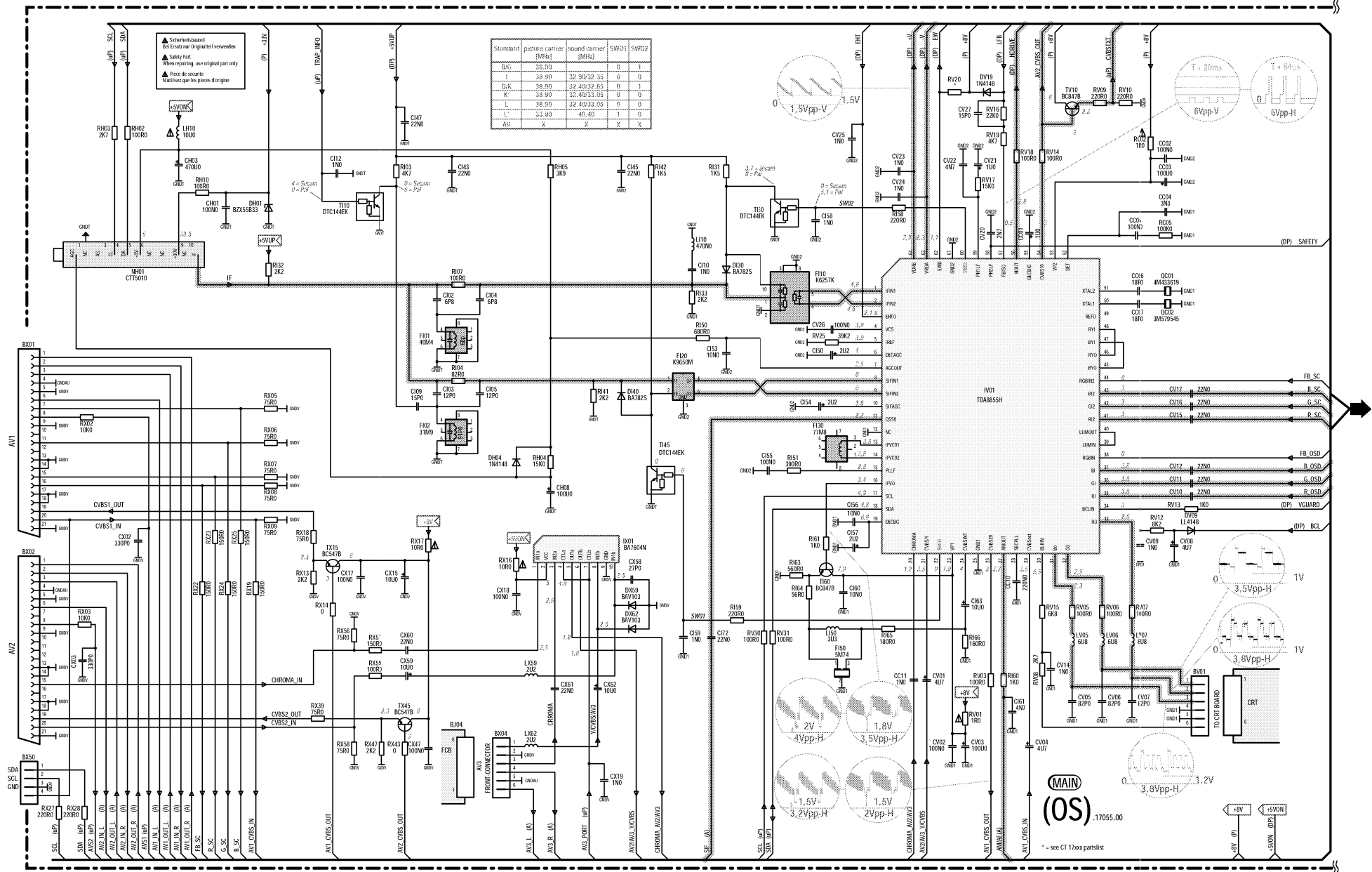
⚠ Sicherheitsbauteil
Bei Ersatz nur Originalteil verwenden
⚠ Safety Part
When repairing, use original part only
⚠ Pièce de sécurité
N'utilisez que les pièces d'origine



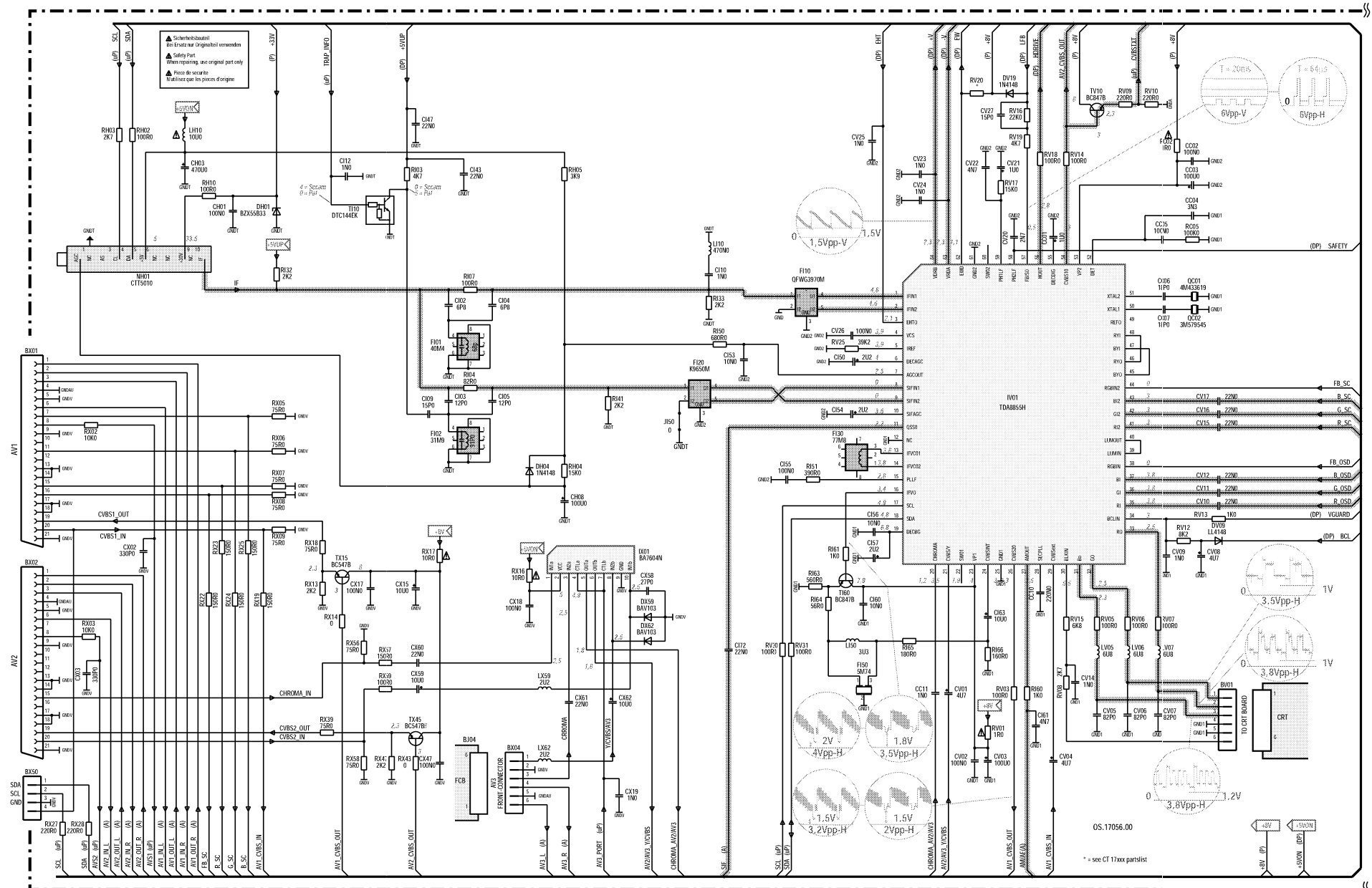
	TV ASY W566CV023X015 55 01
	TV ASY W566CV023X015 65 00
	TV ASY W766CV023X015 (A) 00
	Tube 16/9 24", 28", 32" V/ vectorgun
1051520	TV PSD C1 17083 38
CL1231	15N5F +3.5% -3.5% 1K6V
CL22	27N0F +5% -5% 400.0V
CL24	44N0F +5% -5% 250.0V
CL41	100P0F +10% -10% 50.0V
CL46	100N0F +5% 0.0V
CL51	29N0F +5% -5% 250.0V
D4L8	D-SLP BAV103 20V 0V
DL71	D-ZENER B5X5C2A 24V 500MIOHM
JL60	WIREBARE 22
JL82	0 OHM +0% 100MIOHM
LB05	1F 320UH +4% -4%
LB06	1F-05T 10529 1514460 10
L122	6800UH +5% -3%
L126	1L 30UH 2519 40
RL05	1R21 OHM -1% 70MIOHM
RL02	4K99 OHM -1% 100MIOHM
RL03	6K49 OHM +1% 100MIOHM
RL04	6K49 OHM -1% 100MIOHM
RL05	6K49 OHM +1% 100MIOHM
RL06	2K37 OHM -1% 100MIOHM
RL19	13K0 OHM +5% 100MIOHM
RL41	380K0 OHM +5% 100MIOHM
RL48	220K0 OHM +5% 100MIOHM
RL49	180K0 OHM +5% 100MIOHM



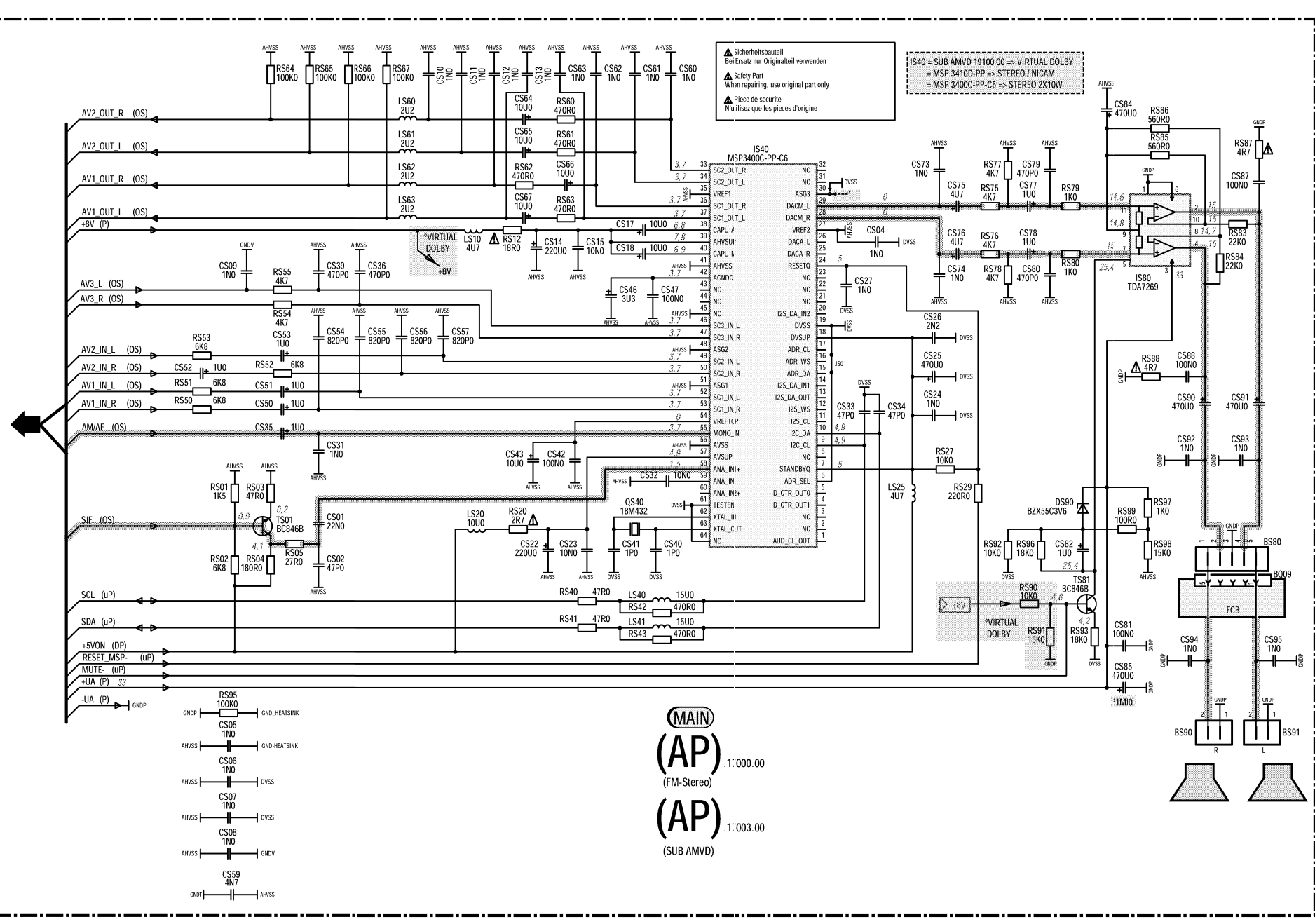
RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO
SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR / TRATAMENTO VIDEO



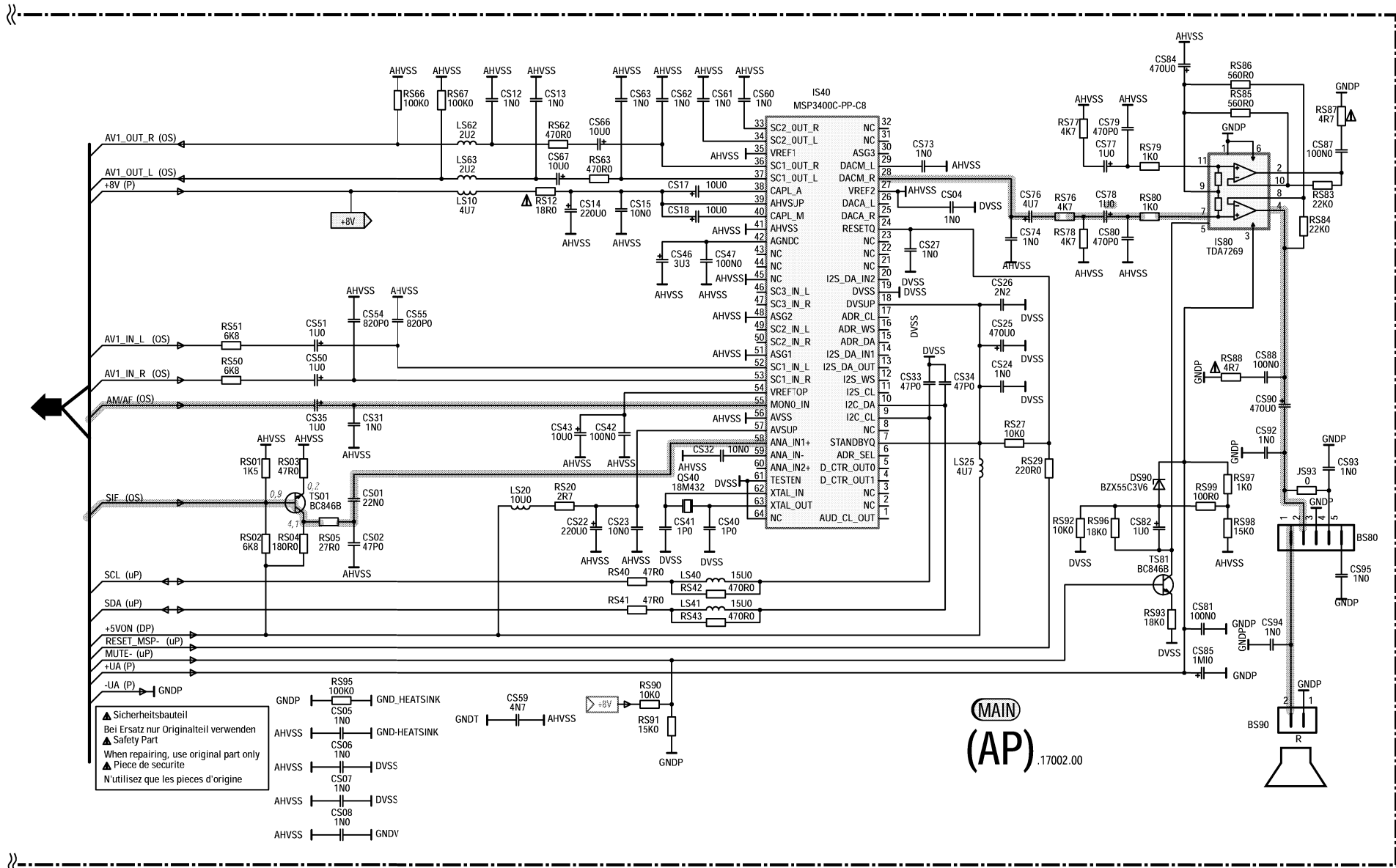
RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO SIGNALVERARBEITUNG - RF/FI/PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR/TRATAMENTO VIDEO



AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE
ESQUEMA DEL AMPLIFICADOR
(STEREO)



AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR (MONO)



POWER SUPPLY - ALIMENTATION - NETZTEIL - ALIMENTAZIONE - ALIMENTACIÓN

(5) : standby

Note :

During measurements in the power supply unit

- Use the primary power unit ground (PGND)

Attention :

Mesure dans le bloc alimentation

- Utiliser la masse du bloc alimentation (PGND)

Achtung :

Bei Messungen im Primärnetzteil

- Primärnetzteilmasse verwenden (PGND)

Attenzione :

misure nell'alimentatore primario

- usare massa alimentazione primario (PGND)

Cuidado :

Medida en el bloque de alimentacion

- Utilizar la masa del bloque de alimentacion (PGND)

Part of board connected to mains supply.

Partie du châssis reliée au secteur.

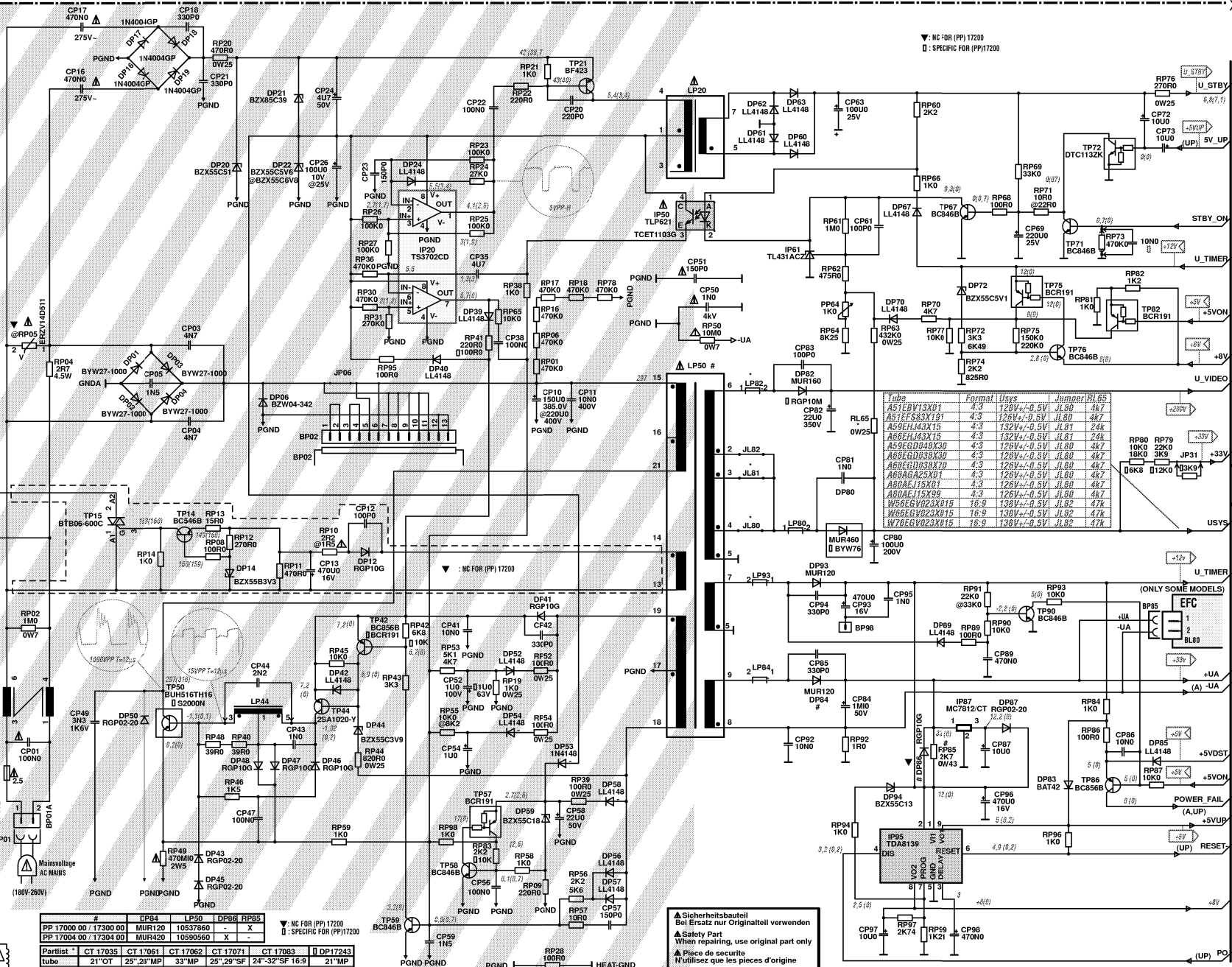
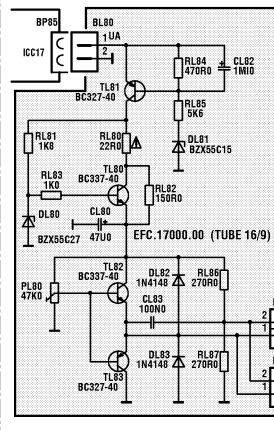
Primärseite des Netzteils.

Parte dello chassis collegata alla rete.

Parte del chassis conectar a la red.

(MAIN)
(PP)

17000
17004
17200
17300
17304
17900



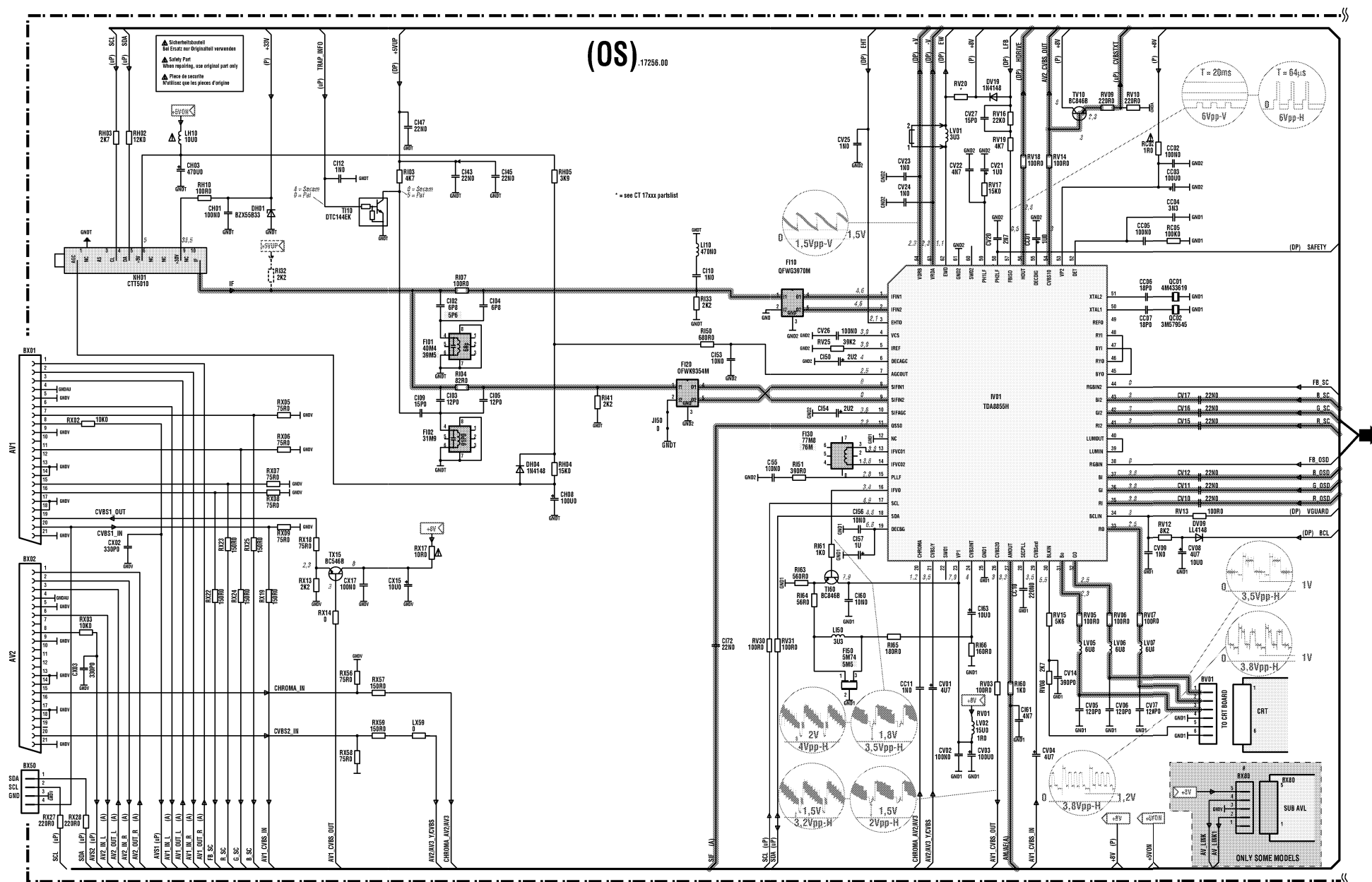
▽: NC FOR (PP) 17200
□: SPECIFIC FOR (PP) 17200

Tube	Format	Usys	Jumper	RL65
A51EBV130D1	4.3	126V+/-0.5V	JL80	4K7
A51EF83X191	4.3	126V+/-0.5V	JL80	4K7
A59EH43X15	4.3	132V+/-0.5V	JL81	24K
A66EH43X15	4.3	132V+/-0.5V	JL81	24K
A59EGD048X30	4.3	126V+/-0.5V	JL80	4K7
A66EGD038X30	4.3	126V+/-0.5V	JL80	4K7
A66EGD038X70	4.3	126V+/-0.5V	JL80	4K7
A66AG25X01	4.3	126V+/-0.5V	JL80	4K7
A66AG15X01	4.3	126V+/-0.5V	JL80	4K7
A66AG15X09	4.3	126V+/-0.5V	JL80	4K7
W56EGV023X015	16.9	138V+/-0.5V	JL82	47K
W66EGV023X015	16.9	138V+/-0.5V	JL82	47K
W76EGV023X015	16.9	138V+/-0.5V	JL82	47K

▲ Sicherheitsbauteil
Bei Ersatz nur Originalteil verwenden
▲ Safety Part
When repairing, use original part only
▲ Pièce de sécurité
N'utilisez que les pièces d'origine



RF/FI/ SCART INTERFACE/VIDEO SIGNAL PROCESSING -HF/FI INTERFACE PERITELEVISION/TRAITEMENT LUMINANCE CHROMINANCE - HF/ZF/ SCART INTERFACE/VIDEO
SIGNALVERARBEITUNG - RF/FI /PRESA PERITEL/ELABORAZIONE VIDEO - RF/FI /EUROCONECTOR/TRATAMENTO VIDEO



»-



(S) : standby

Note :
During measurements in the power supply unit
- Use the primary power unit ground (PGND).

Attention :
Mesure dans le bloc alimentation
- Utiliser la masse du bloc alimentation (PGND).

Achtung :
Bei Messungen im Primärnetzteil
- Primärnetzteilmasse verwenden (PGND).

Attenzione :
misura nell'alimentatore primario
- usare massa alimentazione primario (PGND).

Cuidado :
Medida en el bloque de alimentación
- Utilizar la masa del bloque de alimentación (PGND).

Part of board connected to mains supply.
Partie du chassis reliée au secteur.
Primärseite des Netzteils.
Parte dello chassis collegata alla rete.
Parte del chassis conectar a la red.

MAIN (PP)
17000
17004
17900

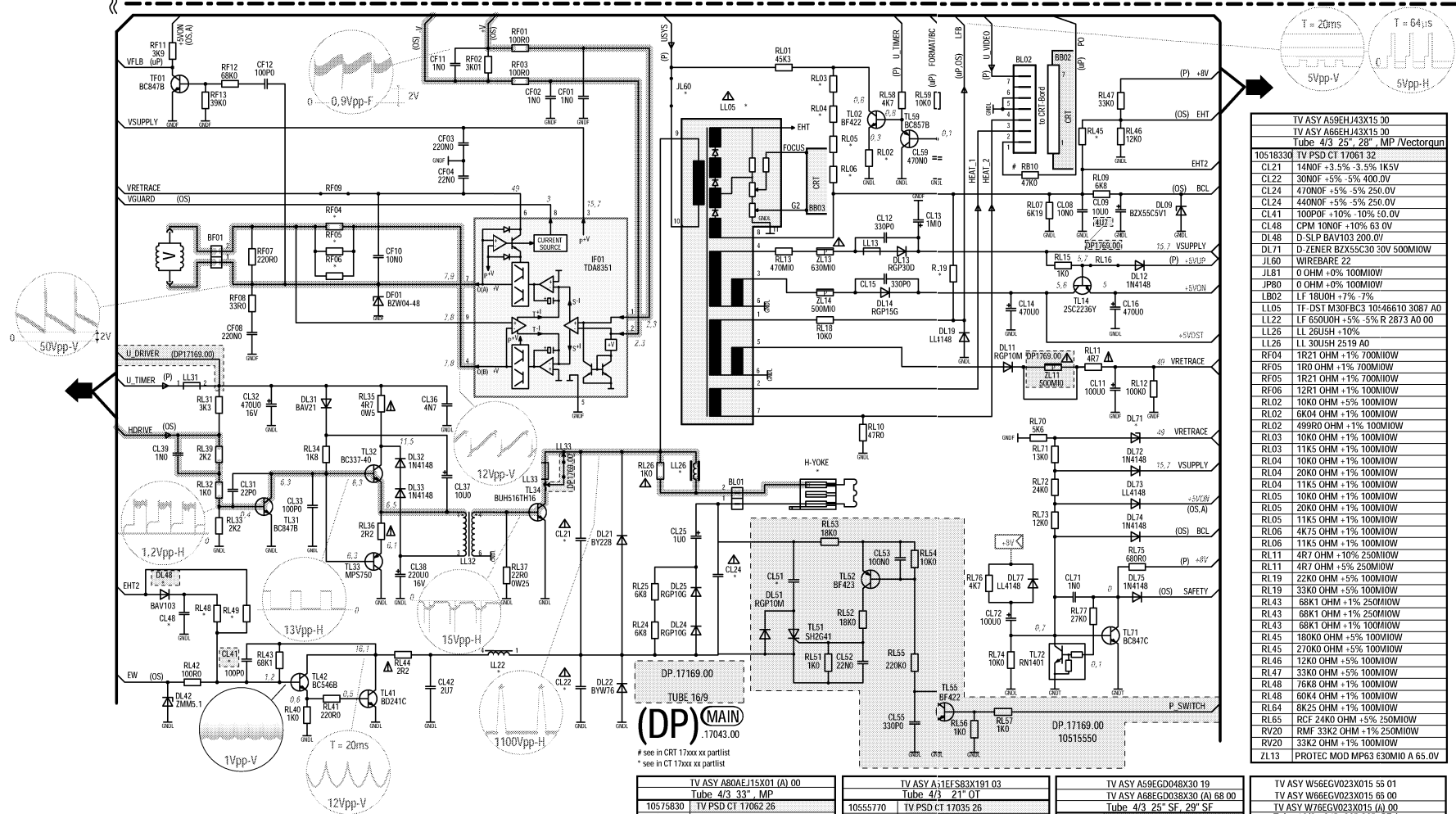
Partlist

Partlist	CT 17095	CT 17061	CT 17062	CT 17071	CT 17083
tube	21" 01	25" 28" MP	33" MP	25" 29" SF	24" 32" SF 16.9
Usys	126V	132V	126V	126V	138V
LL80-82	LL80	LL81	LL80	LL80	LL82
RL65	4K7	24K0	4K7	4K7	47K0

PP 17000 00 MUR120 10537860 - X
PP 17004 00 MUR420 10590560 X -

PP 17000 00 ≥ 10515500 ± 17.12.98
PP 17004 00 ≥ 10590630 ± 17.12.98

⚠ Sicherheitsbauteil
Bei Ersatz nur Originalteil verwenden
⚠ Safety Part
When repairing, use original part only
⚠ Pièce de sécurité
N'utilisez que les pièces d'origine



⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be guaranteed.

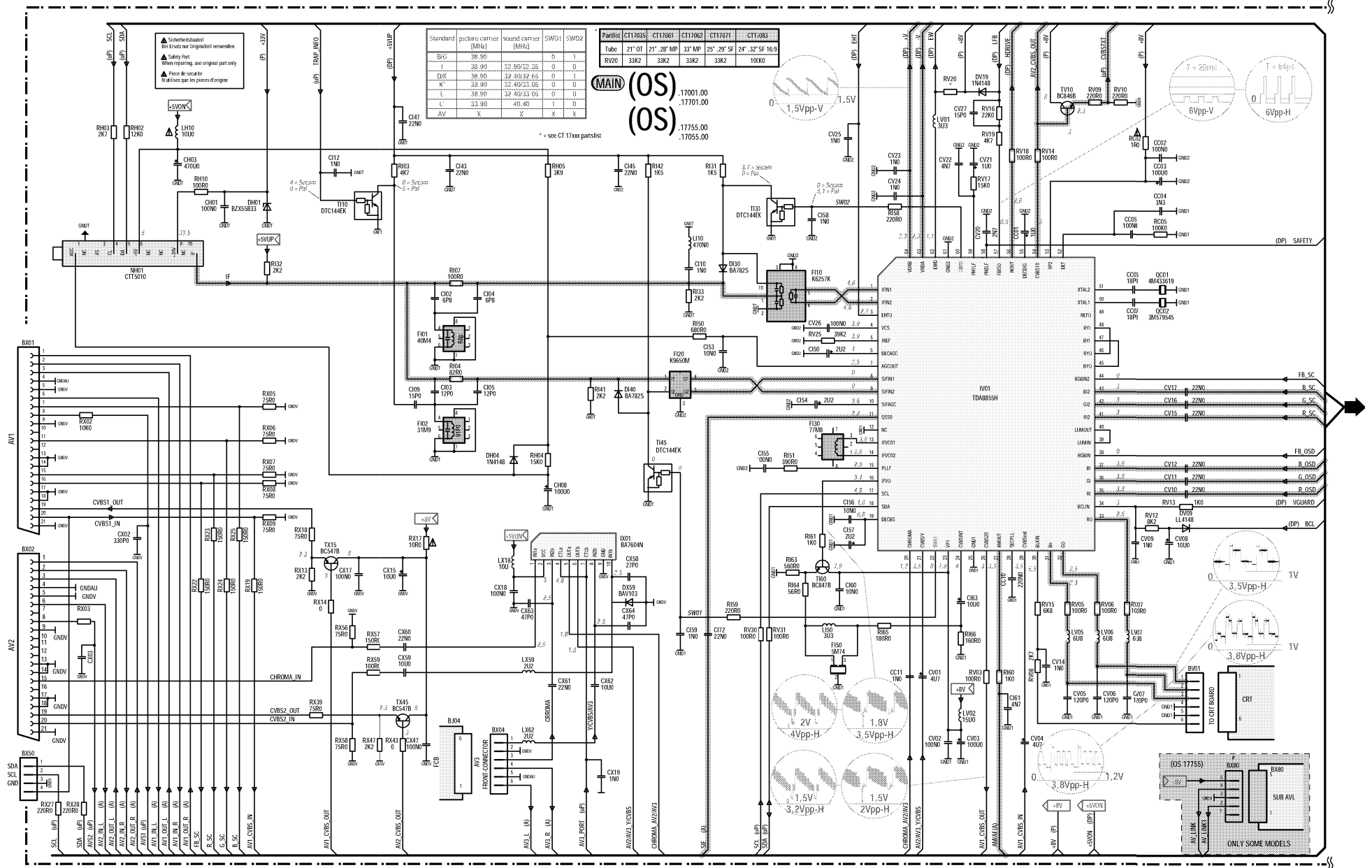
Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraîne la non-conformité de l'appareil.
Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) durch nicht normgerechte Teile ersetzt werden, erlischt die Haftung des Herstellers.

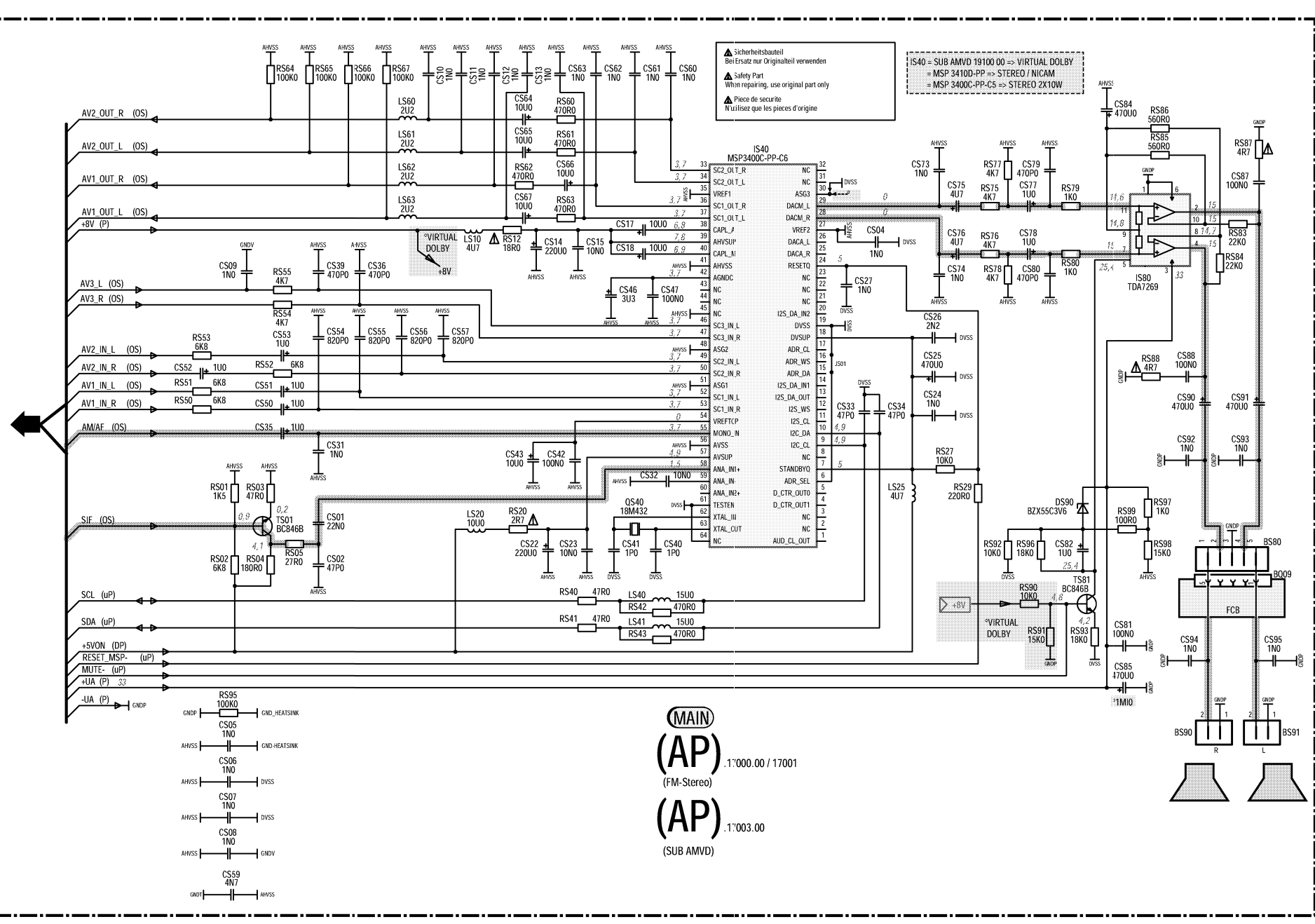
La sostituzione degli elementi di sicurezza (contrassegnati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformità dell'apparecchio.
In tal caso è "esclusa la responsabilità" del costruttore.

La substitución de elementos de seguridad (marcados con el símbolo ⚠) por componentes no homologados según la norma CEI 65, provoca la no conformidad del aparato.
En ese caso, el fabricante cesa de ser responsable.



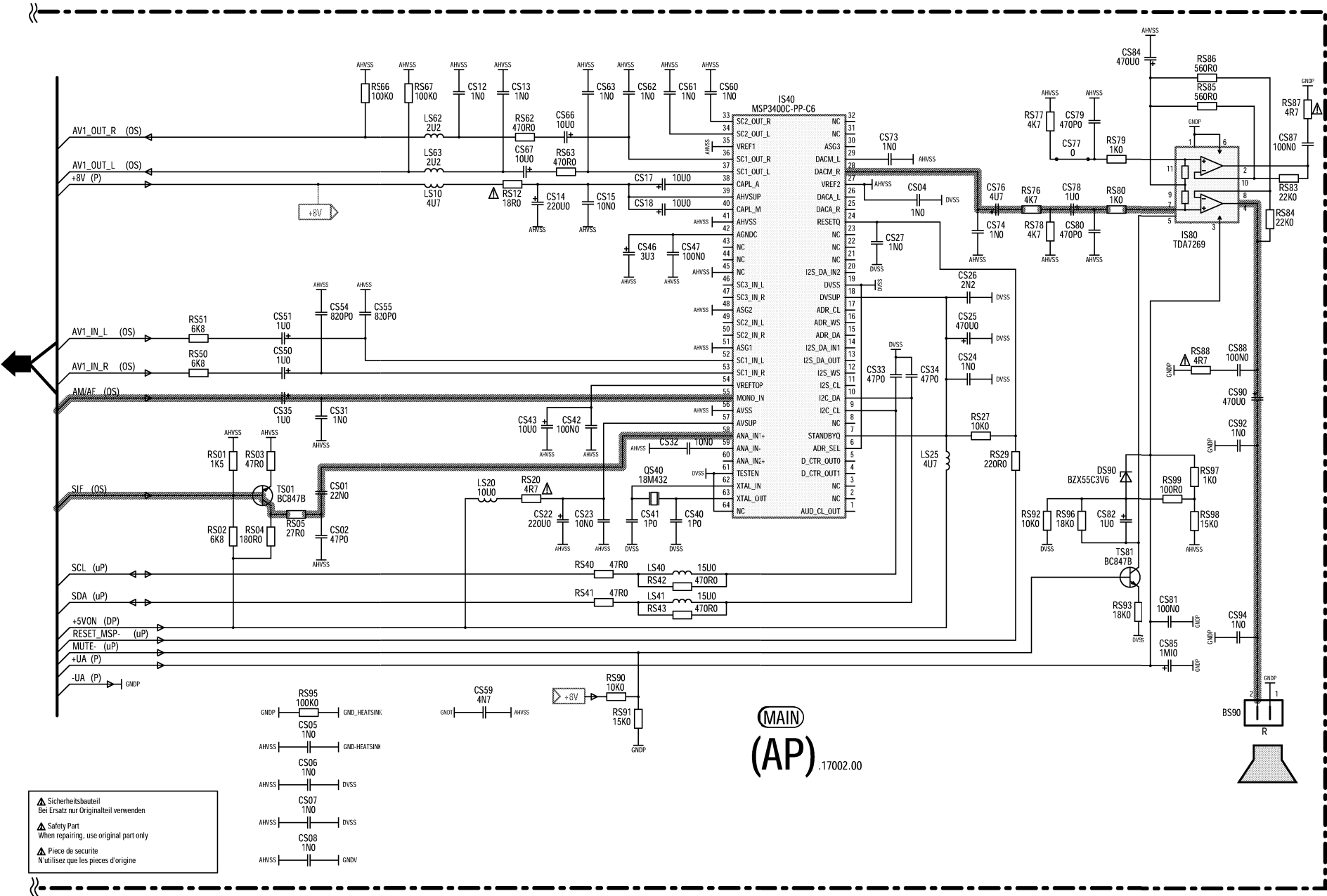


AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE
ESQUEMA DEL AMPLIFICADOR
(STEREO)

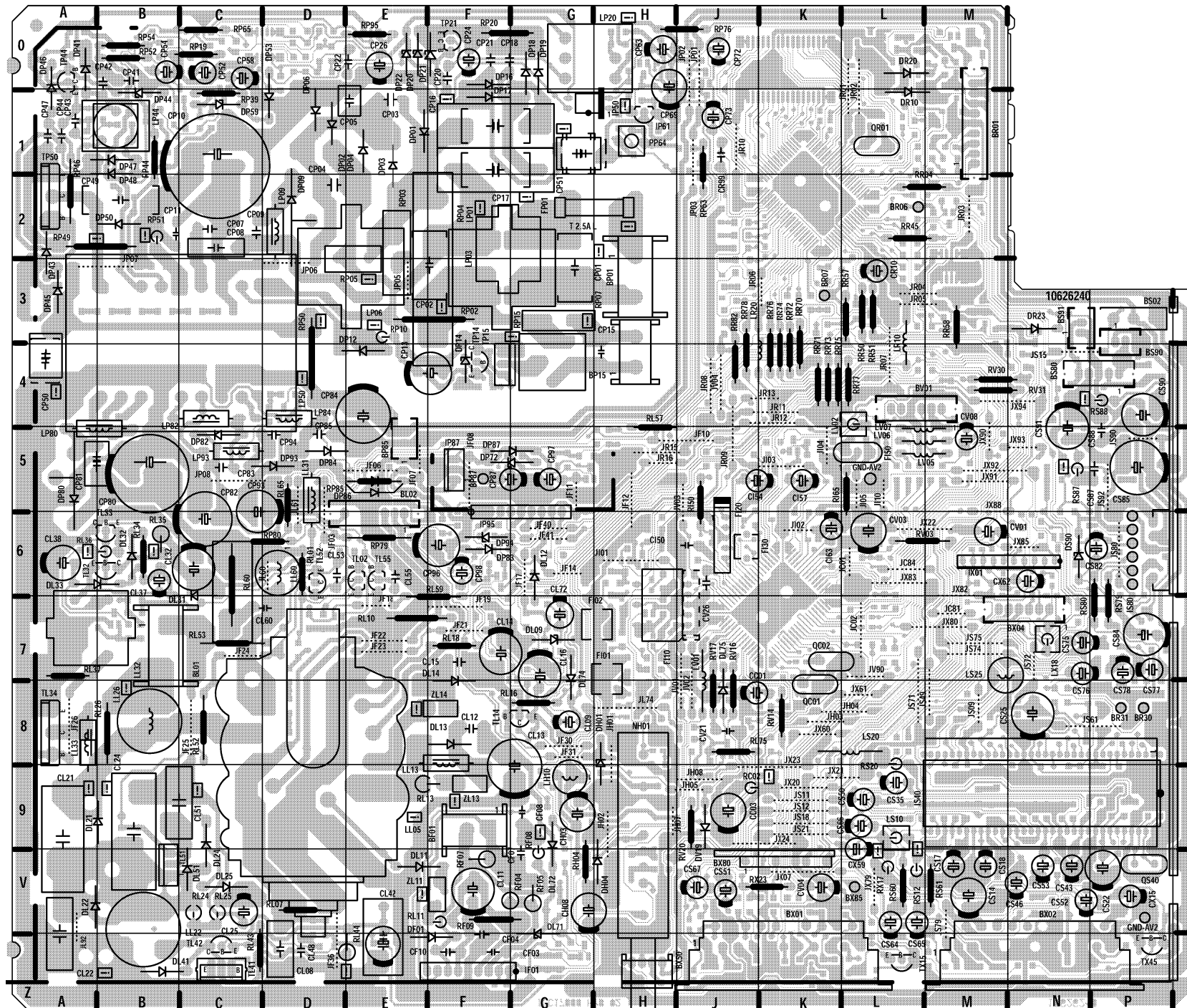


(MAIN)
(AP) :1'000.00 / 17001
(FM-Stereo)
(AP) :1'003.00
(SUB AMVD)

AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD AUDIO-SIGNALVERARBEITUNG - SCHEMA DELL' AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR (MONO)

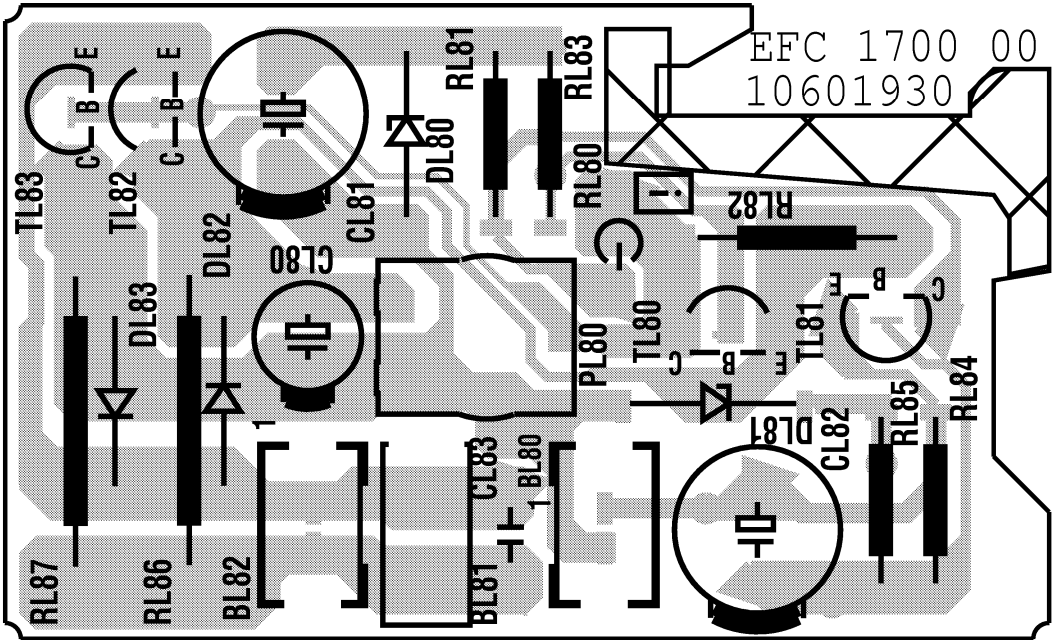


COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES

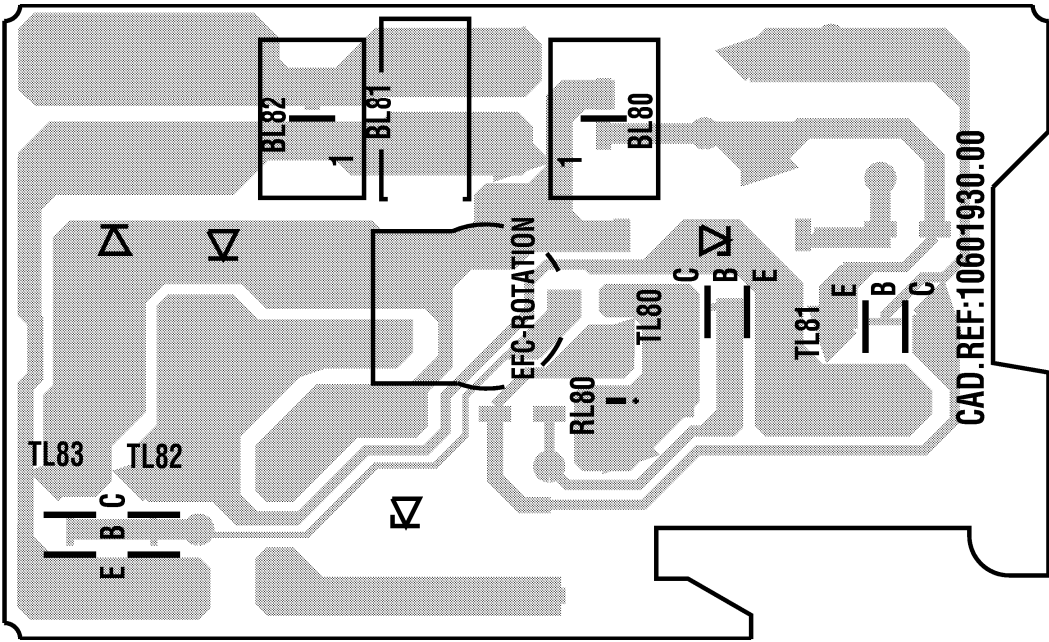


EFC 17000
EARTH-FIELD CORRECTION BOARD

COMPONENT SIDE - CÔTE COMPOSANTS - BESTÜCKUNGSEITE - LATO COMPONENTI
LADO COMPONENTES



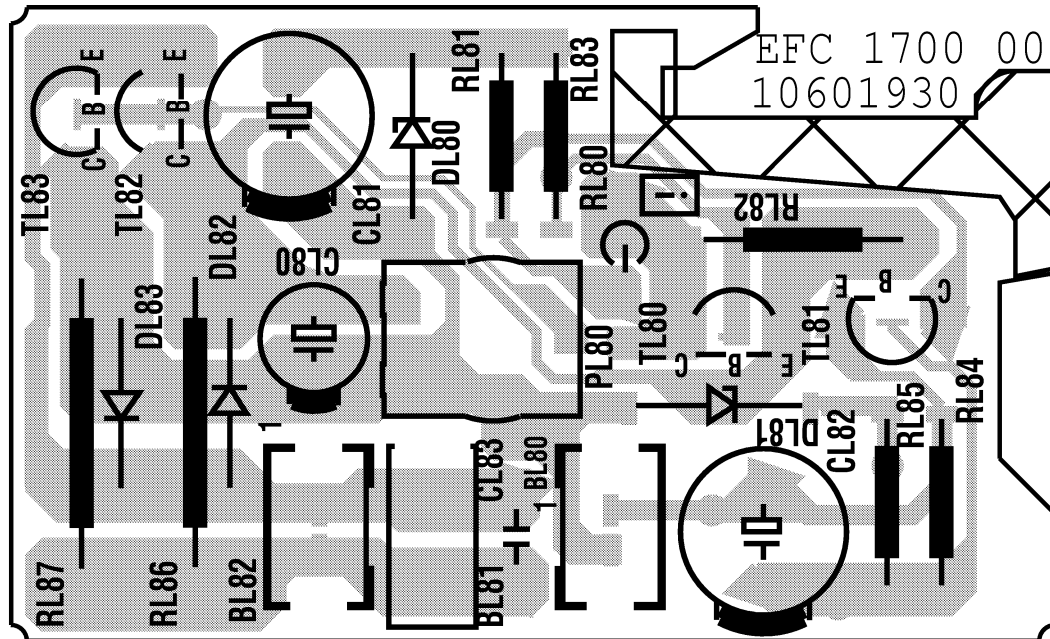
SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



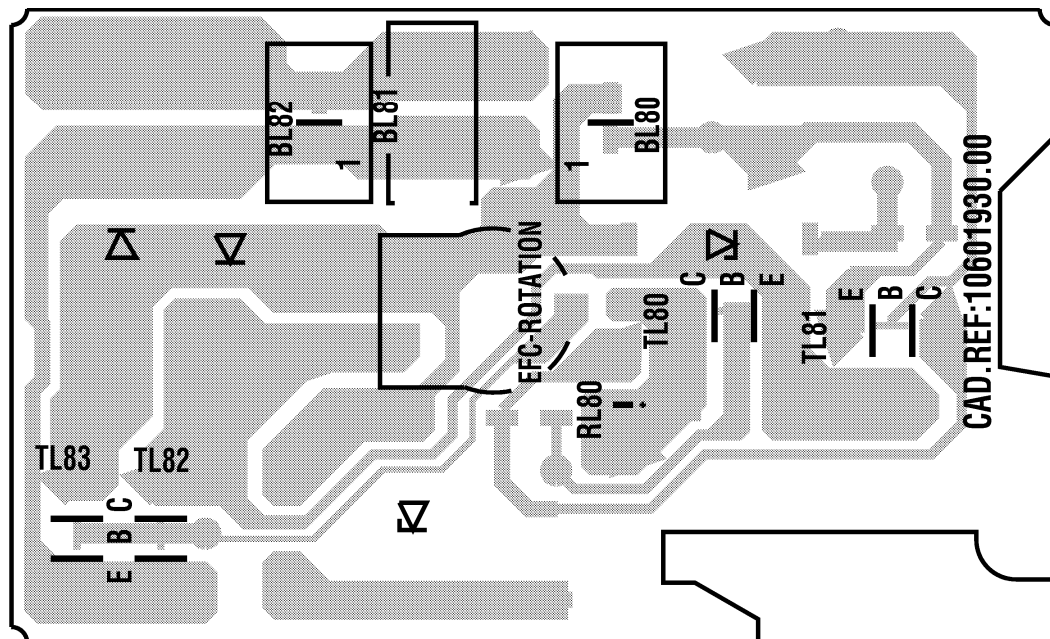
COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES

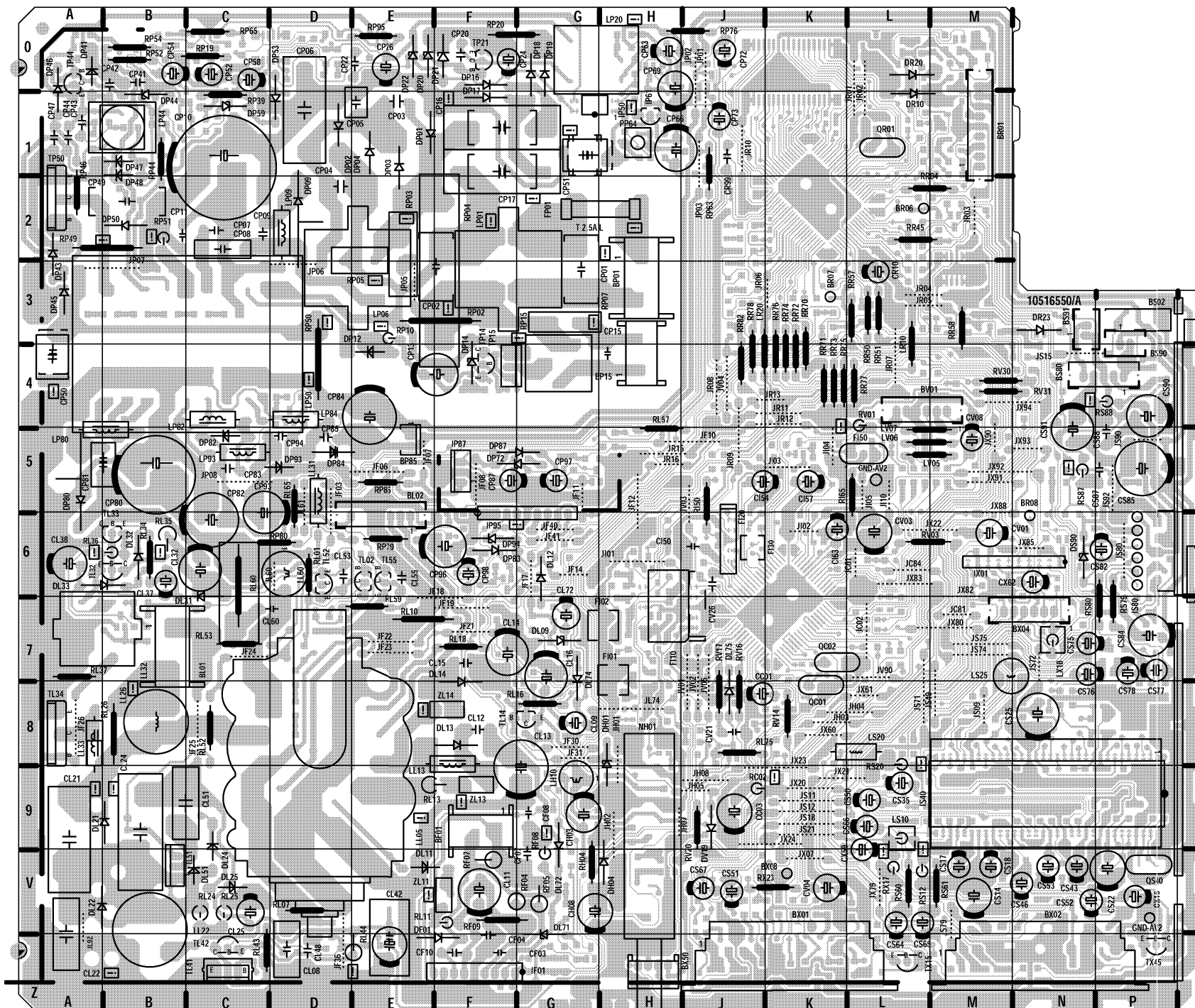
EFC 17000 EARTH-FIELD CORRECTION BOARD

COMPONENT SIDE - CÔTE COMPOSANTS - BESTÜCKUNGSEITE - LATO COMPONENTI
LADO COMPONENTES



SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS





PARTS LIST LISTE PIECES DETACHEES ERSATZTEILLISTE LISTA PARTI DI RICAMBIO LISTA DE PIEZAS DE REPUESTO

THOMSON

Chassis ICC17

MODULES

MAIN	IC17F5RQ02603C	
AVL	SUBAVL17000	R 10614890
CRT	CRT17700 (PCB HYB 02)	R 10651940
FCB	FCB1701	R 25313060
KDB	KDB1706	R 25388640



GK01	TSOP1333	25358570
IB01	TDA6107Q/N2	10659660
IF01	TDA8351	20753830
IP20	TS3702CD FLAT	10537330
IP50	TLP621 GR(D4-LF2 T)	△ 20827900
IP61	TL431ACZ	10538830
IP87	MC7812/CT	46007600
IP95	TDA8139	10044580
IR01	ST92R195 CUT 2.2 FLAT	10588150
IR02	IC-ROM THOMSON V3.20-0	1059455E
IR03	M24C16MN6 FLAT	25348520
IS40	MSP3410D-PP-B3/B4	10510320
IS80	TDA7269	10348790
IV01	TDA8855H FLAT	10533960
IX01	BA7604N	10539590
ZL11	MP25	△ 10500150
ZL13	MP63	△ 10472270



TB01,TL52,TP21	BF423	16003110
TB02,TL02,55	BF422	16003090
TF01,TI60,TL31,TP58,59,67,71,76,90,TR60,TS01,81,TV10	BC846B SMD	16006260
TI10,30,45	DTC144EK SMD	16007030
TL14	2SC2236Y	16000220
TL32	BC337-40	45001466
TL33	MPS750	16001340
TL34,TP50	BUH516TH16	10401110
TL41	BD241C	16001880

TL42,TP14, TX15,45	BC546B	45001866
TL51	THYHIPWR	10576770
TL59,TP42,86, TR15	BC856B SMD	16006310
TL71	BC847C SMD	90618810
TL72	RN1401 SMD	10966100
TP15	BTB06-600C	10259910
TP44	2SA1020Y	16003740
TP57	RN2417 SMD	25423180
TP72,TR20	DTC113ZK SMD	10550750
TP75,82	BCR191 SMD	16006910
TP77	RN1409 SMD	20688820
TR13,23,40	BCR141 SMD	16006890
TX80,81,85,86, 88	BC847B SMD	11070770



DB04,DP16,17, 18,19	1N4004	44009009
DB05	1.5KE250A	25353360
DB30,31,50,51, 70,71,DJ20, DL31	BAV21	44044407
DE01	BZX55C2V7	80444120
DH01	BZX55B33	80442730
DH04,DL12,32, 33,72,74,75, DP53,DR20,23, DV19	1N4148	44009209
DI30,40	BA782S	20542050
DJ20,DL48, DX59	BAV103 SMD	10155030
DK01,DL09, DP72	BZX55B5V1/ZPD5V1 2%	44035702
DL11,24,25,41, DP12,41,46,47, 48	RG10G	10459090
DL13	FUF5402	10458530
DL14	RG15G	10272800
DL19,73,77, DP24,39,40,42, 52,54,56,57, 58,60,61,62, 63,67,70,85, 89,DR21,22,24, DV09	LL4148 SMD	16012450
DL21	BY228	16008370

DL22	BYW76	16009120
DL42	ZMM5,1 SMD	70446740
DL51	RG10M	10455320
DL71	BZX55C20	30948810
DP01,02,03,04	BYW27-1000	10455390
DP06	BZW04-342	25354340
DP14	BZX55C3V3	30948790
DP20	ZPD51/BZX55C51/BZX79C51	90578110
DP21	BZX85C39	80444000
DP22	BZX55C6V8	50890650
DP43,45,50,87	RG102-20	10472330
DP44	BZX55C3V9	80444130
DP59	BZX55C18	11073680
DP80	MUR460	16009650
DP82	FUF4005/MUR160	16009580
DP83	BAT42	16007410
DP84	MUR120	10564670
DP93	MUR420	16009630
DP94	BZX55C13	70438310
DR05	LL42 SMD	16012530
DS90	BZX55C3V6	50890640
DX86	BAS20 SMD	16012250
DX87	BZX84B8V2 SMD	25385640
GE01	TLUV5300 LED	11137650



FI10	OFWK6282K FOS	10648840
FI20	OFWK9650M FOS	10545440
FI50	5M74HZ	20338170
QC01	4M433619HZ	10087710
QC02	3M579545HZ	10542190
QR01	4M0HZ	10254300
QS40	18M432HZ	10334670



FI01	40M4HZ	20300950
FI02	31M9HZ	10552630
FI30	77M8HZ	10559760
LL22		10636390

R : RECYCLED PART
: PIECE RECYCLEE
: AUSTAUSCHTEILE
: RICAMBIO RICICLATO
: MODULO REPROCESADO

For any requests, please contact THOMSON multimedia after sales service area
Pour toutes précisions, contactez votre service apres vente local THOMSON multimedia
Für weitere Auskünfte, wenden Sie sich bitte an die THOMSON multimedia Kundendienst
Per precisazioni, contattare l'assistenza tecnica THOMSON multimedia
Para cualquier pregunta, por favor contactar con el responsable de zona del servicio postventa de THOMSON multimedia

01 / 2000 35105110
REV. N° 0 00 / 00 00000000
1/3



PP64	1K0 OHM	70434550
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RB01,04	1K5 OHM 5% 0,50W	10121880
RB06	220R0 OHM 5% 0,25W	△ 15009810
RB31,51,71	560R0 OHM 10% 0,50W	10257590
RC02	1R0 OHM 5% 0,40W	△ 13060910
RF05	1R21 OHM 1% 0,70W	13010820
RF07	220R0 OHM 1% 0,70W	10233720
RF08	68R0 OHM 5% 0,70W	15009050
RL01	45K3 OHM 1% 0,25W	15018160
RL07	6K19 OHM 1% 0,40W	15020490
RL13	0R27 OHM 5% 2,50W	10263600
RL35,RS87,88	4R7 OHM 5% 0,35W	△ 10226310
RL36,RP10	2R2 OHM 5% 0,25W	△ 15009870
RL43	68K1 OHM 1% 0,70W	10147740
RL44	1R0 OHM 5% 0,50W	△ 10576360
RP04	2R7 OHM 5% 4,50W	10379110
RP15	18R0 OHM 220V PTC	△ 41398800
RP39,52,54,95, RR45,RV03,14, 30,31	100R0 OHM 5% 0,25W	30943330
RP49	0R47 OHM 5% 2,5W	△ 25339900
RP50	10M0 OHM 5% 0,70W	△ 10074320
RP63	432K0 OHM 1% 0,13W	10354720
RS12	18R0 OHM 5% 0,30W	△ 15009660
RV20	100K0 OHM 1% 0,25W	50883810
RX17	10R0 OHM 5% 0,25W	△ 15009580



CB01	10N0F 3K0V	14036450
CL08	10N0F 5% 400V	14035870
CL12,15,55, CP18,21,42,85, 94	330P0F 20% 1K0V	14035270
CL21	15N0F 3.5% 1K6V	10643660
CL22	27N0F 5% 400V	10263540
CL24	440N0F 5% 250V	△ 10525280
CL51	290N0F 5% 250V	10378450
CP01	100N0F 20% 275V	△ 10331520
CP03,04	4N7F 1K0V	10058740
CP05	1N5F 10% 1K0V	20338740
CP10	150U0F 385V	43424800
CP11	10N0F 10% 400V	15001080
CP16,17	470N0F 20% 275V	△ 10596570
CP20	220P0F 10% 400V	14033000
CP49	3N3F 20% 1K6V	10607950
CP50	1N0F 20% 400V	△ 43106800
CP51	150P0F 20% 400V	△ 20738090
CP81	1N0F 10% 500V	10546570
CP83	100P0F 20% 1K0V	14035280



LL05	DSTTDS29	△ 10608670
LL26		△ 10526140
LL32	DRIVER	10518110
LP01		△ 10261530
LP20	DRIVER	△ 10554410
LP44	DRIVER	10561800
LP50	SMT41	△ 10537860

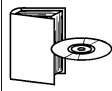
OTHER PARTS AUTRES PIECES SONSTIGE TEILE ALTRE PARTI OTRAS PIEZAS

BB05	CATHODE RAY TUBE SOCKET SUPPORT TUBE CATHODIQUE BILDROEHRENFASSUNG SUPPORTO TUBO CATODICO SOPORTE T.R.C	△ 80298800
BJ10	CINCH SOCKET PRISE CINCH CINCH-BUCHSE PRESA CINCH TOMA CINCH	10037440
BJ11	SVHS SOCKET PRISE SVHS S-VHS-BUCHSE PRESA SVHS TOMA SVHS	20392900
BQ12	JACK SOCKET PRISE JACK BUCHSE PRESA JACK TOMA JACK	10539510
BX01,02	SCART SOCKET PRISE PERITEL EURO-AV-BUCHSE EUROPRESA NORMALIZZATA EUROCONNECTOR	90617260
CH200	ON/OFF SWITCH CONTACTEUR MARCHE/ARRET EIN-AUS SCHALTER CONTATTORE ACCESO/SPENTO CONTACTOR MARCHA/PARADA	△ 10276500
FP01	2A5T TIME-LAG FUSE 2A5T FUSIBLE TEMPORISE 2A5T THERMISCHE SICHERUNG 2A5T FUSIBILE TEMPORIZZATO 2A5T FUSIBLE TEMPORIZADO	△ 10246750
NH01	CTT5010 UHF/VHF TUNER CTT5010 TETE UHF/VHF CTT5010 UHF/VHF TUNER CTT5010 TUNER UHF/VHF CTT5010 SINTONIZADOR UHF/VHF	20812280
SK01,02,03,04	MICROSWITCH MICRO CONTACTEUR MIKROSCHALTER MICROINTERRUTTORE MICROCONTACTOR	30011100

EQUIPMENT/PRESENTATION EQUIPEMENT/PRESENTATION AUSSTATTUNG/GEHAEUSE PARTI VARIE EQUIPO/PRESENTACION

FRONT PANEL FACADE FRONTPLATTE PANNELLO FRONTALE PANEL FRONTAL	25346170
REAR PANEL DOS RUFCKWAND PANNELLO POSTERIORE TAPA POSTERIOR	△ 25433840
INFRARED WINDOW GLACE INFRAROUGE INFRAROT FENSTER VETRO INFRAROSSO CRISTAL INFRARROJO	25373830
LOGO THOMSON LOGO THOMSON SCHRIFTZUG THOMSON MARCHIO THOMSON LOGOTIPO THOMSON	25367520
CHASSIS SUPPORT SUPPORT CHASSIS CHASSIS HALTER SUPPORTO CHASSIS SOPORTE CHASSIS	25296750
COVER JACK SOCKET CACHE PRISE JACK ABDECKUNG BUCHSE COPERCHIO PRESA JACK CUBIERTA TOMA JACK	25298150
8R OHM 15W LOUDSPEAKER 60X125 8R OHM 15W HAUT PARLEUR 60X125 8R OHM 15W LAUTSPRECHER 60X125 8R OHM 15W ALTOPARLANTE 60X125 8R OHM 15W ALTAVOZ 60X125	10467060
ON/OFF BUTTON TOUCHE MARCHE/ARRET EIN-AUS TASTE TASTO ACCESO/SPENTO TECLA MARCHA/PARADA	25309090
BUTTON ASSY ENSEMBLE DE TOUCHES TASTENEINHEIT ASSIEME TASTI CONJUNTO DE TECLAS	25312630
POWER SUPPLY LEAD CORDON D'ALIMENTATION NETZKABEL CAVO DI ALIMENTAZIONE CABLE DE ALIMENTACION	△ 10260880
W66EJU023X015 CATHODE RAY TUBE W66EJU023X015 TUBE CATHODIQUE W66EJU023X015 FARBBILDROEHRE W66EJU023X015 TUBO CATODICO W66EJU023X015 T.R.C	△ 10647170
DEGAUSSING COIL BOBINE DE DEMAGNETISATION ENTMAGNETISIERUNGSSPULE BOBINA DI SMAGNETIZZAZIONE BOBINA DE DESMANTACION	△ 47320181
RCTMB100 REMOTE CONTROL RCTMB100 TELECOMMANDE RCTMB100 FERNBEDIENUNG RCTMB100 TELECOMANDO RCTMB100 TELEMANDO	20879230
FOLDING BOX EMBALLAGE CARTON KARTON IMBALLAGGIO CARTONE EMBALAJE CARTON	25443870

FITTING DOWNER 25348810
CALE INFERIEURE
POLSTER UNTEN
DISTANZIATORE INFERIORE
CALZO INFERIOR
FITTING UPPER 25348820
CALE SUPERIEURE
POLSTER OBEN
DISTANZIATORE SUPERIORE
CALZO SUPERIOR



28WN22E PARTS LIST 35105110
28WN22E LISTE DE PIECES DETACHEES
28WN22E ERSATZTEILLISTE
28WN22E LISTA PARTI DI RICAMBIO
28WN22E LISTA DE PIEZAS DE REPUESTO
ICC17 SERVICE MANUAL EUROPE 35063330
ICC17 DOC TECHNIQUE EUROPE
ICC17 TECHNISCHE DOKUMENTATION EUROPE
ICC17 DOCUMENTAZIONE TECNICA EUROPE
ICC17 DOCUMENTACION TECNICA EUROPE
28WN22E UM TH D/F/I/E/GB/NL/S/DK/PL/GR 25390150
28WN22E NU TH D/F/I/E/GB/NL/S/DK/PL/GR
28WN22E BA TH D/F/I/E/GB/NL/S/DK/PL/GR
28WN22E IU TH D/F/I/E/GB/NL/S/DK/PL/GR
28WN22E IU TH D/F/I/E/GB/NL/S/DK/PL/GR
ICC17 UPDATING N°01 35080950
ICC17 MISE A JOUR N°01
ICC17 ERGAENZUNG N°01
ICC17 AGGIORNAMENTO N°01
ICC17 ACTUALIZACION N°01
CDROM ICC17 35065140
CDROM ICC17
CDROM ICC17
CDROM ICC17
CDROM ICC17

LES PROGRAMMES

LA FORMATION PARATECHNIQUE

LES PRODUITS HIGH TECH

FORMATION VENDEURS

MICRO INFORMATIQUE

JOURNÉES FORMATION SERVICE

MAINTENANCE 1^{er} DEGRÉ D'INTERVENTION

LES STAGES TECHNIQUES

- Techniques vidéo
- Techniques Télévision

NOS COORDONNÉES

RÉSUMÉS DE COURS

CASSETTES D'AIDE À LA MAINTENANCE

BULLETIN D'INSCRIPTION

ACCÈS À NOS LOCAUX

HOTELS

QUITTER

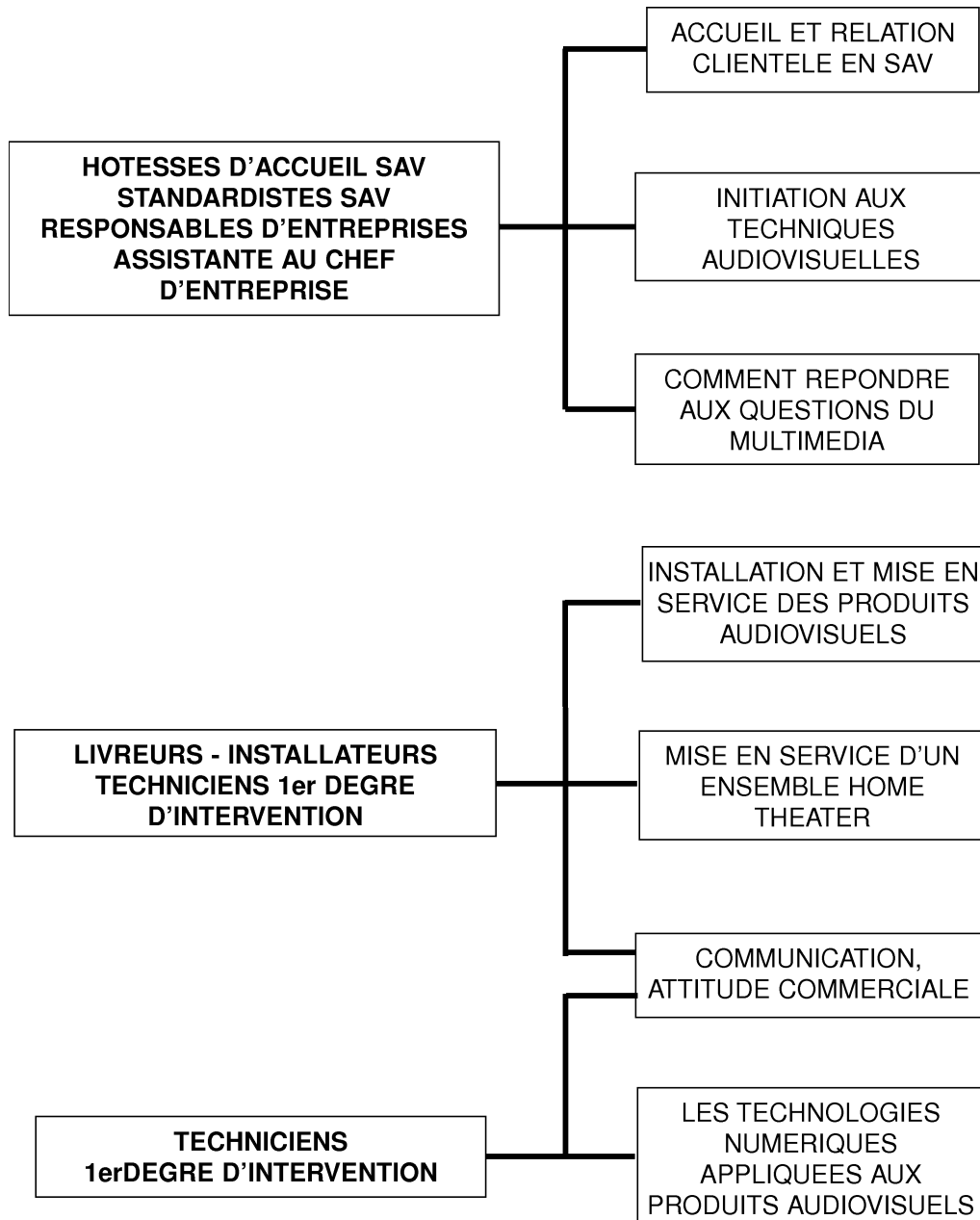
THOMSON MULTI MEDIA



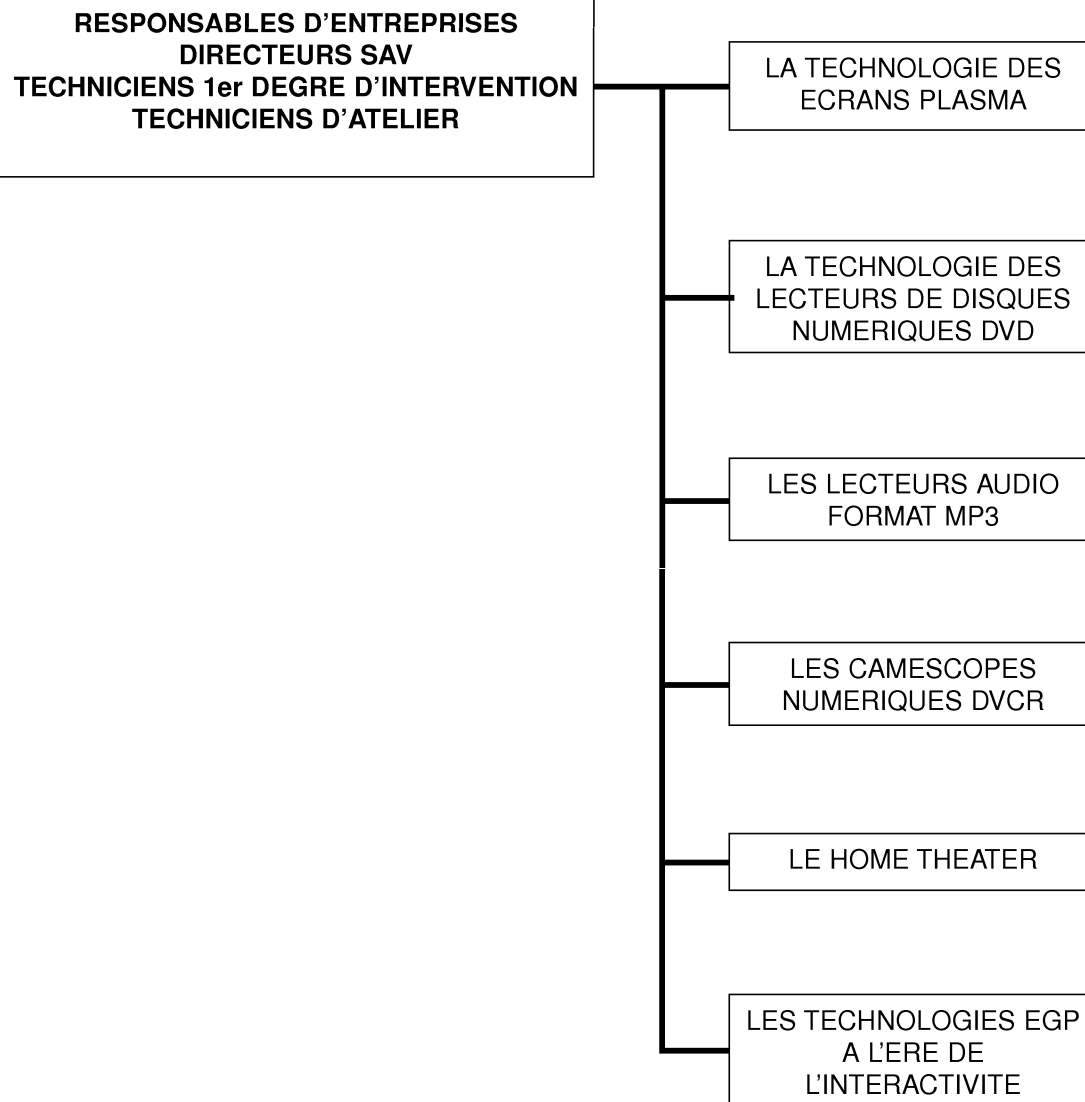
CENTRE DE FORMATION THOMSON multimedia

2000

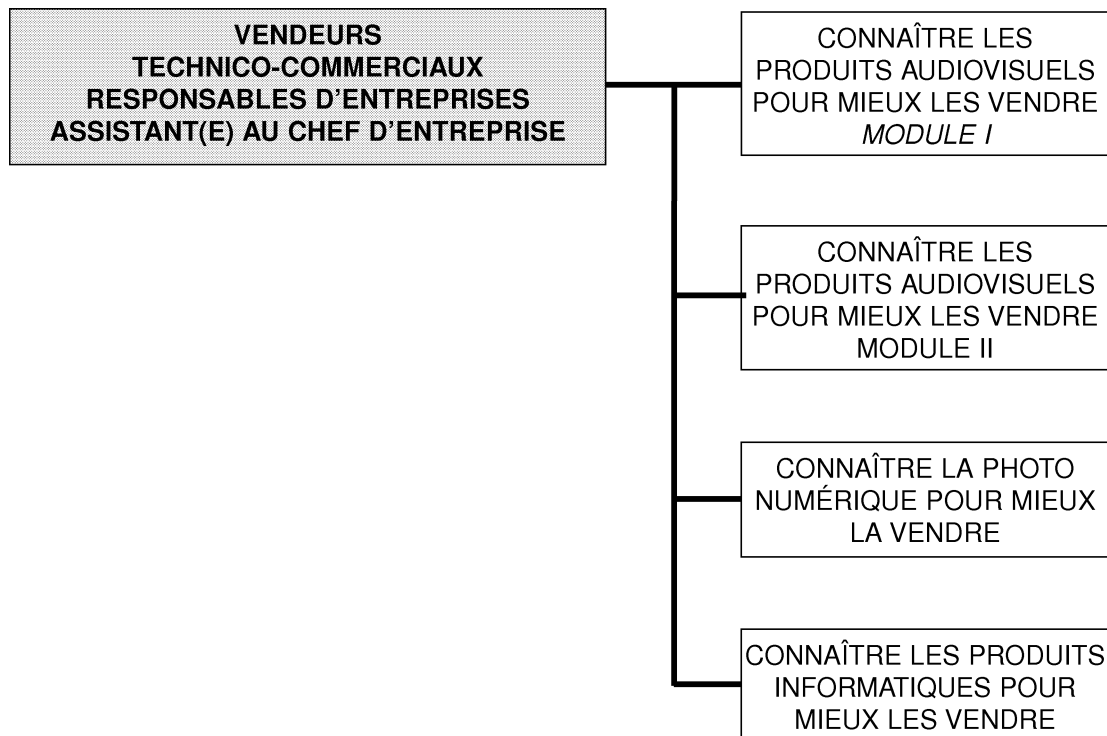
LA CHAÎNE du SERVICE



LES PRODUITS HIGH TECH



LES FORMATIONS VENDEURS



MICRO INFORMATIQUE

MAINTENANCE

CONFIGURATION ET
MAINTENANCE DES PC

INSTALLATION DE
PÉRIPHÉRIQUES MULTIMEDIA
ET RÉSEAUX

SYSTEME D'EXPLOITATION

WINDOWS 98 AVANCÉ -
LINUX

INTERNET

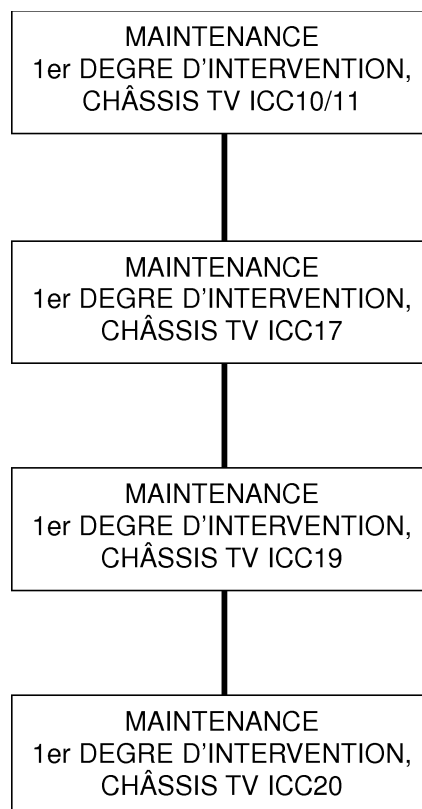
INITIATION A INTERNET -
CRÉATION DE
SITE WEB

LES JOURNÉES FORMATION SERVICE

ASSISTANCE A LA
MAINTENANCE, CHÂSSIS
VIDEO R4000 / R5000

ASSISTANCE A LA
MAINTENANCE, CHÂSSIS TV
ICC9

ASSISTANCE A LA
MAINTENANCE, CHÂSSIS TV
TX91-91G / TX92-92F

MAINTENANCE***1er degré* D'INTERVENTION**

LES TECHNIQUES VIDÉO

LECTEURS DVD

PRINCIPE ET MAINTENANCE
DES LECTEURS DVD
DTH 1000/2000/2500

PRINCIPE ET MAINTENANCE
DES LECTEURS DVD
DTH 3300/3600/3700

MAGNÉTOSCOPES

PRINCIPE ET MAINTENANCE
DES MAGNÉTOSCOPES VHS

ETUDE APPLIQUÉE DES
MAGNÉTOSCOPES,
CHÂSSIS R6000 ET R7000

ETUDE APPLIQUÉE DES
MAGNÉTOSCOPES,
CHÂSSIS R8000

ETUDE APPLIQUÉE DES
MAGNÉTOSCOPES,
CHÂSSIS R9000

EVOLUTION DES CHÂSSIS
R7000
DÉPANNAGE DIRIGÉ DES
CHÂSSIS R6000/R7000

CAMESCOPIES

LES BASES
DES CAMESCOPIES
FORMAT VHS-C ET VIDÉO 8

LA MAINTENANCE DES
CAMESCOPIES VHS-C,
CHÂSSIS M10, M11 ET M12

LA MAINTENANCE DES
CAMESCOPIES DV, CHÂSSIS
VMD2, VMD3 ET VMD8

LES TECHNIQUES TÉLÉVISION

